HIGH SCHOOL SUCCESS: AN EFFECTIVE INTERVENTION FOR ACHIEVEMENT AND DROPOUT PREVENTION

by

Christopher Michael Lowder

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Approved by:

_____
Dr. Dawson R. Hancock

_____
Dr. Chuang Wang

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Dr. James J. Bird

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Dr. Jeanneine P. Jones

ABSTRACT

CHRISTOPHER MICHAEL LOWDER. High School Success: An effective intervention for achievement dropout prevention. (Under the direction of DR. DAWSON R. HANCOCK)

The purpose of this mixed-design study was to use quantitative and qualitative research to explore the effects of High School Success (a course for at-risk ninth graders) and its effectiveness on student achievement, attendance, and dropout prevention. The research questions address whether there is a significant difference between at-risk ninth graders that were enrolled in High School Success and at-risk ninth graders who were not enrolled in High School Success as measured by the North Carolina End-of-Course Assessment for English I, the student pass rate for English I, student attendance rates during the semester they were enrolled in High School Success, and student dropout rates. Three groups of students participated in the study, and data were collected in the form of interviews with students, teachers, and professors.

Students who were enrolled in High School Success had statistically significant better achievement and significantly lower dropout rates than students who were not enrolled in High School Success. No significant differences were found in student attendance for students who were enrolled in High School Success.

DEDICATION

This dissertation is dedicated to my wife and two incredible daughters. To Stephanie, I want to say thank you for supporting me in every way possible. I also want to say I love you very much. To Hayley and Maggie, I want to say I am very proud of both of you and I love each of you more than you will ever know.

I also want to dedicate this dissertation to my parents who always put their children first. It would not have been possible without your sacrifices and hard work. Thank you and I love you.

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LIST OF ABBREVIATIONS

ABC	NC Accountability Model
AYP	Annual Yearly Progress
CEEP	Center for Evaluation and Education Policy
CLC	Content Literacy Continuum
GDP	Gross Domestic Product
IEP	Individualized Education Plan
KUCRL	University of Kansas Center for Research on Learning
LEA	Local Education Agency
NICHD	National Institute for Child Health and Human Development
NMSA	National Middle School Association
NCWISE	North Carolina Window on Student Education
NCLB	No Child Left Behind
NCDPI	North Carolina Department of Public Instruction
NCEOC	North Carolina End of Course Test
NCEOG	North Carolina End of Grade Test
NCSOS	North Carolina Standard Course of Study
SIM	Strategic Instruction Model

CHAPTER 1: INTRODUCTION

Improving high school graduation rates is one of the main priorities for many politicians and civic leaders. President Obama, Former Secretary of State Colin Powell, and U.S. Secretary of Education Arne Duncan have all been involved recently with challenging schools and society to increase high school graduation rates (Brachman & Hobgood, 2010). As the United States transforms and integrates into a more global economy, it has become increasingly evident that a high school diploma is a minimum standard for success in the workplace (Barton, 2005; NASSP, 2005; Orgfield, 2004). For example, a high school dropout is more likely than a high school graduate to be unemployed, to be on public assistance, to earn lower wages, to be a single parent, to have a child at a younger age, and to be in prison (Monrad, 2007). Additionally, each student who does not complete high school costs society in several ways, including but not limited to:

1) $139,000 in reduced tax payments;
2) $40,500 in increased public health costs;
3) $26,600 due to increased crime; and
4) $3,000 in increased welfare costs, on average, over a lifetime.

(Levin, Belfield, Muening, 2007, p.462).

Nationally, almost one third of students do not graduate and in many areas, especially in areas of poverty, the dropout rates can be as high as 50% or 60% (Swanson, 2004

North Carolina has made a strong effort over the past few years to prevent high school students from dropping out (NC districts, 2010). North Carolina State Board of Education Policy HSP-Q-001 defines a dropout as any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school. In North Carolina, about one fourth of students do not graduate from high school (Trend shows, 2010). With 25% of students dropping out of high school, one of North Carolina Governor Beverly Perdue's specific goals is to reduce the dropout rate and make sure all students are college-and workplace-ready when they graduate (Trend shows, 2010).

Most professionals agree that one of the best ways to reduce the number of students dropping out of high school is to intervene early in their middle school or high school careers (Stanley & Plucker, 2008). In Philadelphia, 40% of eventual dropouts showed early warning signs of dropping out in Grade 6, and 80% of eventual dropouts were identified by the end of Grade 9 (Neild, 2009). Unfortunately, once students get behind, if there is not a powerful intervention to get them back on track, their odds of dropping out of high school go up significantly. Barbara Allensworth and John Easton's (2005) work at the University of Chicago provides evidence that freshman-year course performance is strongly linked to eventual graduation from high school (p. 18). Students who succeed in their first year of high school are more likely to continue to do well as they progress and eventually graduate (Allensworth & Easton, 2005). As Allensworth and Easton (2005) state, "Freshman year performance is a much better predicator of graduation than simple categorization of students based on their backgrounds" (p.16).

Once students fall behind in their credits or fall behind the class with which they entered, they become more likely to drop out of high school. In a recent study, the New York City Department of Education showed that 93% of the city's dropouts were older for their grade and behind in the number of credits they had earned toward graduation (Shore & Shore, 2009). For each academic year, high school dropouts earned fewer course credits than did on-time graduates in English, mathematics, and science (Balfanz, Letgers, & Jordan, 2004). According to the Consortium on Chicago School Research, "being on track is a baseline indicator of acceptable, though not necessarily strong, school performance" (Allensworth & Easton, 2005).

According to Allensworth and Easton's (2005) work, students on track at the end of their freshman year are about four times more likely to graduate than off-track students. Making sure that students are at or above grade level is so important that providing an intervention in the freshman year is necessary to prevent students from dropping out of high school.

In Cabarrus County Schools, the 10th largest school district in North Carolina, the most important class for ninth-grade students is English I. According to the 2011 *Cabarrus County Schools High School Curriculum Guide*, ninth-grade students must pass English I and any five other subjects to "meet local promotion standards" and be promoted to 10th grade. Under this system, students need six total credits to advance to the 10th grade, but the most important class for ninth graders is English I. Since ninth grade is the critical year (because of its link to eventual graduation from high school, English I is the critical course for that year and because it is the only course that a student must have to progress to 10th grade), the best intervention for potential high school

dropouts is one that will assist students with English I and overall learning and literacy (Allensworth & Easton, 2005). Many interventions in elementary and middle school could potentially assist students before they enter high school; however, when students begin high school, administrators, counselors, and teachers must be prepared to immediately intervene with student deficiencies, especially with the state-mandated English I course.

Problem Statement and Purpose of the Study

Too many students drop out of high school because they get behind in credits early in their high school career. These students do not have sufficient support or intervention for deficiencies that are apparent before they ever enter high school. In Cabarrus County Schools, these at-risk students have an even more pressing need to be successful in English I because of local graduation requirements. The problem is that there is an obvious need for a reading and literacy intervention for students with deficiencies in these areas if these students are going to be successful in English I and therefore stay on track to graduate on time.

In recognition of this problem, Cabarrus County Schools have implemented an intervention called High School Success. This is a class scheduled for entering ninth graders who have reading and literacy deficiencies. The students who are scheduled for this class are at risk for dropping out because they were not reading at grade level according to the NCEOG test for reading in Eighth Grade. In High School Success, students receive the Strategic Instruction Model (SIM) intervention in a small setting during the same semester they are enrolled in English I. The students receive at least 30 minutes of the SIM intervention each day. Instruction during the rest of the class focuses

on supplementing the work that was done in the English I class and also keeping students current with their homework assignments and with class work. This intervention provides several types of support to, ideally, prevent them from dropping out of school: It takes place early in the ninth grade, it keeps them on-track, it improves their attendance because of their relationship with and support of the teacher, and it gives them strategies for being successful in their other classes.

Students who are labeled with learning disabilities or are labeled with deficiencies in reading and writing receive services that are outlined in their Individual Education Plans. Students who are determined to have limited proficiency in English have an instructional plan designed specifically for them. These students are at risk of academic failure, but also receive support and assistance through special education teachers and services. Because these students receive individualized plans and assistance as part of their educational plan, they are not enrolled in High School Success.

Students who are often just as at risk are the students who do not perform at grade level but also do not receive any of these services. Research has shown that students who are not classified with learning disabilities exhibit problems with language learning similar to those experienced by students who are classified with learning disabilities (Sparks, Ganschow, Javorsky, Pohlman, & Patton, 1992; Sparks & Ganschow, 1993). Many of these students may have been tested for special-education services but do not receive them because of a few points on a test or slightly higher than normal achievement on certain tests or in certain classes. For these students, this very important transition from eighth to ninth grade must be, and often is, made without assistance at all. These students begin to fall behind very quickly and do not have anyone at the school level who

is aware of how much they are struggling until the pattern of failure has begun. Many of these students have begun to fail or have begun to miss many days of school because they are not engaged or are not succeeding. These students represent an important target group that can benefit from the High School Success class in an effort to increase the rate of graduation from high school.

Preventing students from dropping out of high school is a high priority for schools nationally, in North Carolina, and in Cabarrus County Schools. While the importance of lowering dropout rates has been widely discussed and various approaches researched, the role of the High School Success class has not been investigated. The purpose of this study was to compare the performance of potential high school dropouts who were enrolled in High School Success to potential high school dropouts who were not enrolled in High School Success. This study addressed the impact of the High School Success class on student English I EOC scores, the student pass rate for English I, student attendance rates, and student dropout rates. The investigation resulted in a better understanding of student achievement as defined by the North Carolina End-of-Course (NCEOC) Test for English I and student pass rates in English I. The study also addressed the difference in attendance and dropout rates for students who were enrolled in High School Success versus the students who were not enrolled in High School Success. This study also analyzed the students' perspectives, the teachers' perspectives, and the professors' perspectives of the High School Success class by using interviews. Ultimately, the study determined whether participants believe High School Success was successful or not.

The Strategic Instruction Model (SIM)

The SIM, which was developed at the University of Kansas Center for Research on Learning (KUCRL), was intended primarily for students with known learning disabilities, but research also suggests that students who use its learning strategies will improve their performance (Boudah & O'Neill, 1999). The history and depth of the research on this model indicate that it is an excellent tool for helping students stay on track in ninth grade.

The KUCRL website states:

> For 25 years, we have conducted research designed to develop ways to help students meet the demands of life, not just in school but after they leave school as well. Our overriding goal has been to develop an integrated model to address many of the needs of diverse learners. Out of this effort, the Strategic Instruction Model (SIM)® has evolved. In essence, SIM is about promoting effective teaching and learning of critical content in schools. SIM strives to help teachers make decisions about what is of greatest importance, what we can teach students to help them to learn, and how to teach them well (Center for Research on Learning., n.d.).

The SIM involves two types of interventions, teacher-focused and student-focused. The teacher-focused interventions are called Content Enhancement Routines and are designed to help teachers present information in ways that students can more easily identify, organize, comprehend, and recall it. An example of a teacher-focused intervention is the Unit Organizer Routine. It offers teachers ways to (a) plan units and

(b) introduce and maintain big ideas in units. It also demonstrates how units, critical information, and concepts relate (Center for Research on Learning., n.d.).

The student-focused interventions are called Learning Strategies. They are designed to provide students with the skills and strategies they need to learn the content. The Learning-Strategies curriculum teaches strategies for acquiring information from the printed word, organizing and memorizing information, solving math problems, and written expression (Center for Research on Learning., n.d.). The reading strategies help students discover what words mean, comprehend what they read, acquire vocabulary, and understand how the structure of text works. They are essential for a well-balanced reading program (Center for Research on Learning., n.d.). Extensive research by the KUCRL has been reviewed by scientific panels at the U.S. Department of Education and has been documented as demonstrating that the SIM can improve student performance. An example of a student-focused intervention is the Test-Taking Strategy. It is designed to help students allocate time and priorities on their tests, to focus on important elements, recall information, make well-informed guesses, and take control of a testing situation (Center for Research on Learning., n.d).

The purpose of the SIM learning strategies is to provide students with tools that can help them succeed. Researchers have defined learning strategies as "an individual's approach to completing a task and using a set of skills to accomplish a task (Schumaker & Deshler, 1992, p. 462). Using this philosophy, a teacher teaches learning strategies so that students can apply them to specific content areas.

These types of learning strategies are helpful for students at almost any age. They are even more important when studying adolescents, because learning strategies are

among the few research areas that have focused on adolescents in secondary schools. While there has been significant research with younger students, there has not been a significant investment in research with adolescents in secondary schools (Deshler & Hock, 2007).

Nature of the Study

This mixed-methods study used quantitative descriptive research to explore the effects of High School Success on student performance on the NC English I EOC, the student pass rate for English I, student attendance, and on dropout rates. Results of the quantitative portion of the study were determined by the outcomes of the NC English I EOC, student pass rates for English I, the student attendance rates during the semester they were enrolled in High School Success, and by the dropout rates of students who were enrolled in High School Success compared to the results for students who were not enrolled in High School Success.

The study also used analyses of qualitative interviews from the following three groups involved in the study: the 14 students (two from each school) who were enrolled in High School Success, the seven teachers who taught the strategies to students, and the two professors who taught the teachers each month for one school year.

Research Questions

Using the analysis of the outcomes of the NC English I EOC, student pass rates in English I, student attendance rates, student dropout rates, and interviews with participants, this study addressed the following questions:

1. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in

High School Success, as defined by student performance on the NC English I EOC?

2. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by the student pass rates in English I?
3. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success as defined by student-attendance rates?
4. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by dropout rates?
5. Was High School Success a successful intervention in the schools, as defined by interviews with students, teachers, and professors?
6. What were the perceptions of students, teachers, and professors of High School Success and its effect on NC English I EOC scores, student pass rates in English I, student attendance, and dropout rates?

Significance of the Study

One in four students in North Carolina drops out of high school and does not graduate ("NC districts," n.d.). Besides the moral, ethical, and economic reasons to help prevent students from dropping out of high school, school systems are judged nationally for their dropout rates as part of the No Child Left Behind (NCLB) legislation as part of their Annual Yearly Progress (AYP) computation; also, in North Carolina, school

systems are judged for their dropout rates within their ABCs Accountability Model for state performance. District leaders and principals must be aware and proactive in preventing students from dropping out of high school to meet state and federal accountability standards.

Results from this study support the need for ninth-grade literacy and learning interventions as one of the primary strategies for preventing students from dropping out. While there has been significant research on younger students, there has not been a significant investment in research on adolescents in secondary schools (Deshler & Hock, 2007). Results could convince district and school leaders to spend the resources necessary (monetarily and with personnel) to provide these interventions for students who are potential dropouts. Successful interventions move the district forward in accomplishing AYP goals set by NCLB federal legislation and ABC goals set by the North Carolina Department of Public Instruction.

Organization of the Study

Chapter 1, the introduction, provides background for the dropout problem nationally and in North Carolina. It also provides a background of the significance of the ninth-grade year, an overview of the High School Success class and an overview of the SIM. Chapter 1 also states the significance of this study, which is centered on High School Success and its use as a deterrent for students who are at risk for dropping out of high school. Chapter 2 includes and expands on the theoretical base introduced in Chapter 1. It characterizes dropouts, the importance of the ninth-grade year, and the significance of the SIM. The literature review also explores the importance and impact of dropouts nationally and within the state of North Carolina and some of the predictors of

dropouts such as: (a) not being on track at the end of the ninth grade, (b) inconsistent attendance, and (c) a lack of an appropriate early literacy intervention. Since providing a literacy intervention for potential dropouts during the ninth grade year is crucial for increasing the graduation rate, the literature review also summarizes research to date on predictors, causes, and interventions that have helped students succeed despite literacy and task-completion deficiencies. Chapter 2 concludes with a review of the literature that supports the study's research design. Chapter 3 details the mixed-methods research design and methodology, including the participants, variables, and treatment that were introduced in the research-question portion of the paper. A detailed review of the NCEOC Test for English I is outlined in the instrumentation section. The study also documents any improved student pass rates, student attendance rates, and lower dropout rates. Chapter 4 reports the findings of the study, and Chapter 5 discusses their implications.

Definitions of Terms

ABCs Accountability Model: North Carolina's school-improvement plan to reorganize public schools around three goals: strong Accountability, am emphasis on the Basics and high educational standards, and providing schools and school districts with as much local Control over their work as possible. Under the ABCs, schools are evaluated on standardized tests. Schools are rewarded for making or surpassing expected student achievement goals ("ABCs," n.d.).

Adequate yearly progress (AYP): Adequate yearly progress is the measure by which schools, districts, and states are held accountable for student performance under Title I of the No Child Left Behind Act of 2001. It was introduced into federal law in the

1994 reauthorization of the Elementary and Secondary Education Act. The measure is used to determine whether schools are successfully educating their students. The state determines its own AYP standards and the federal government must approve them. The results are then compared to prior years and the results are used to determine whether the school has made adequate yearly progress towards the proficiency goals ("No child," September 10, 2004).

Association for Middle Level Education (AMLE): AMLE is the only national education association dedicated exclusively to those in the middle grades, including principals, teachers, central office personnel, professors, college students, parents, community leaders, and educational consultants across the United States, Canada, and 46 other countries (http://www.nmsa.org/AboutNMSA/tabis/76/Default.aspx).

Attendance rates: Students are considered present if they attend two periods out of four each day. Attendance rates measure whether or not a student was present for at least two periods on a given day.

Content Literacy Continuum (CLC): a coordinated, school wide approach to improving literacy for all students in secondary schools, enabling them to meet higher standards (http://clc.kucrl.org/)

Core subjects: Under the Elementary and Secondary Education Act, English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography are considered core subjects.

Individualized education plan (IEP): Each public school child who receives special education and related services must have an Individualized Education Plan (IEP). Each IEP must be designed for one student and must be an individualized document.

Each IEP provides an opportunity for teachers, parents, school administrators, related services personnel, and students (when appropriate) to work together to improve educational results for children with disabilities ("Guide," 2007).

Local education agency (LEA): Each school system in North Carolina is referred to as an LEA.

Local promotion standards: The requirements for being promoted to the next grade. Each local education agency is allowed to set its own standards for promotion to the next grade.

National Institute for Child Health and Human Development (NICHD): the NICHD was initially established to investigate the broad aspects of human development as a means of understanding developmental disabilities, including intellectual and developmental disabilities, and the events that occur during pregnancy. Today, the institute conducts and supports research on all stages of human development, from preconception to adulthood, to better understand the health of children, adults, families, and communities (http://www.nichd.nih.gov/about/overview/).

North Carolina Window on Student Education (NCWISE): First introduced in 2004, NCWISE integrates all aspects of public school life from the classroom to the central office. It is web-based and centrally maintained for capturing, accessing, and reporting a wide spectrum of student information (http://www.ncwise.org/).

No Child Left Behind (NCLB): The No Child Left Behind Act of 2001 was signed into law by President Bush on January 8, 2002. It is a reauthorization of the Elementary and Secondary Education Act (ESEA), the central federal law in precollegiate education. The ESEA was first enacted in 1965. The NCLB expanded the

federal role in education and became a focal point for education policy. The legislation laid out requirements that reach into almost every public school. It contains a number of measures that are designed to spur broad gains in student achievement and to hold states and schools more accountable for student progress (No child, September 21, 2004).

North Carolina Department of Public Instruction (NCDPI): The NCDPI is the agency charged with implementing North Carolina's public school laws and the State Board of Education's policies and procedures governing prekindergarten through 12th-grade public education. The elected State Superintendent of Public Instruction heads the Department and functions under the policy direction of the State Board of Education (http://www.ncpublicschools.org/organization/)

North Carolina End of Course Assessment (NCEOC): Tests used to sample a student's knowledge of subject-related concepts as specified in the North Carolina Standard Course of Study. In 2011-2012, students enrolled in the following courses are required to take the NCEOC tests: Algebra I, English I, and Biology (http://www.dpi.state.nc.us/accountability/testing/eoc/).

North Carolina Standard Course of Study (NCSOS): The NCSCOS is the curriculum that should be made available to every child in North Carolina's public schools. The curriculum is revised on a regular basis based on the changing needs of national, state, and local requirements. (http://www.ncpublicschools.org/curriculum/).

Talent Development High School: A comprehensive reform model for large high schools facing serious problems with student attendance, discipline, achievement scores, and dropout rates (http://web.jhu.edu/CSOS/tdhs/index.html).

CHAPTER 2: LITERATURE REVIEW

Introduction

The review of literature will establish the problems with the graduation rate nationally and in North Carolina. It will also establish that many students enter high school below grade level and not prepared for high school work. A careful reading of the research establishes important elements of a plan to assist these students in graduating from high school.

First, a review of literature establishes that there must be an intervention and it must begin in the ninth grade (Allensworth & Easton, 2005). The intervention must be early in high school and it must keep students on grade level and prevent them from getting "off track" (Neild, Stoner-Eby, & Furstenberg, 2008). Another very important element of student success is student attendance. An intervention should occur before students are off track and before they create poor attendance habits for themselves (Stanley & Plucker, 2008).

The literature review will also show that many students need help with their overall literacy skills. The majorities of students who are considered at risk for dropping out have significant deficiencies and can benefit from help with their reading and comprehension skills (Jetton & Dole, 2004). Unfortunately, a majority of the work that has been done nationally on learning strategies that can assist teachers and students has been done with elementary and middle school students (Zimmerman, 2008).

The SIM intervention provides teacher and student strategies that can help students be more successful. The strategies are designed to benefit adolescent students and can provide an effective framework for an early high school intervention (Boudah & O'Neill, 1999). Using many of these strategies, students can become more successful and more likely to graduate in four years. These strategies were developed primarily for students with known learning disabilities, but the research suggests that regular education students who use these learning strategies will also improve their performance (Boudah & O'Neill, 1999).

The National Dropout Problem

Students dropping out of high school are a major national problem. There are varying levels of graduation rates that differ from state to state. President Obama highlighted the importance of this effort when he announced a $900 million federal investment to improve the United States' graduation rates (Almeida, Steinberg, Santos, & Le, 2010). The Diplomas Count 2008 report states that 6,829 students are "lost" from high school each day in the United States; loss is defined as failing to graduate with a standard high school diploma within four years (Hastings, 2011). Almost one third of students do not graduate from high school in the United States (Swanson, 2004). This equates to 1.2 million students who do not graduate from high school each year (Richmond, 2009).

In May 2008, the Center for Evaluation and Education Policy issued a brief that emphasized the value of a high school diploma to the graduating student and to the student's community. As stated by Neild et al. (2008), "Entrance into adult life without a high school diploma carries severe economic and occupational disadvantages" (p.40). It

is estimated that high school dropouts also cost the public sector $209,100 per capita over a lifetime (Levin et al., 2007). At this rate, high school dropouts cost the United States at least $300 billion per year (Princiotta & Renya, 2009).

The United States has quickly become part of a more global workplace and it has become increasingly evident that a high school diploma is a minimum standard for success in the workplace (Barton, 2005; National Association of Secondary School Principals, 2005). According to a 2008 survey by the Organization for Economic Cooperation and Development (OECD), which is an international organization that helps governments deal with economic, social, and governance challenges, the United States ranked 21st in high school graduation rates among developed countries, even though it outspent the majority of them as a percentage of gross domestic product (Bridgeland, Dilulio, & Balfanz, 2009). Aside from the moral reasons for providing students and future citizens with a sound education, the high school graduation rate in the United States has become an economic survival crisis that must be addressed immediately.

North Carolina Dropouts

As high school dropouts and overall graduation rates have become more of a focus for concern, there has been some debate about how states report and define dropouts. Some states track students throughout their high school careers, and other states simply track seniors when they begin the 12th grade and then track how many of those receive a diploma. In North Carolina, a dropout is defined as "any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school" (Owen, Rosch, Muschkin, Alexander, & Wyant, 2008).

North Carolina did set up an improvement plan, but the goals and touchstones were not difficult to reach. Originally, the state had an improvement plan for high school graduation that many saw as vastly inferior, because it showed progression even when there was really not much movement forward. As noted by Princiotta and Renya (2009), "If North Carolina were to simply meet its annual 0.1% improvement target, it would need 97 years to reach the state goal of 80%" (p.48). Because North Carolina and many other states were not tracking consistently or accurately, NCLB legislation required states to comply with a four-year-cohort rate model. A cohort model takes the number of students from the beginning of ninth grade; students who enter that grade for the first time form a cohort that is subsequently adjusted by adding any students who transfer into the cohort at any point during the ninth grade or the next three years and subtracting any students who transfer out, emigrate to another country, or die during that same period (doe.sd.gov/documents/FebGradDo.pdf). (In 2005-2006, North Carolina reported a four-year-cohort graduation rate for the first time. Under current NCLB guidelines:

1. A dropout is a student who was enrolled at some time during the previous school year but who was not enrolled (and who does not meet reporting exclusions).
2. A single individual may be counted as a dropout more than once if he/she drops out of school in multiple years.

No student who drops out is counted more than once each year (i.e., if he/she drops out twice in the same school year, he/she is not counted twice; (Owen et al., 2008).

As all states struggle with how to improve their graduation rates, North Carolina finds itself below the United States average. A little more than one fourth of North Carolina's public school students fail to graduate from high school after four years. That

means that of the 112,321 students who began high school in North Carolina in 2006, 29,000 of them failed to graduate from high school four years later; 83,321 were successful (DPI, NC, 2010).

As each year goes by and more students do not receive a high school diploma, North Carolina is affected economically. Only 11 states have a higher percentage of their adult population lacking a high school diploma than North Carolina (Gottlob, 2007), in which 715,895 adults, aged 20-64, do not have a high school diploma.

Importance of the Ninth-Grade Year

The high number of students dropping out of high school in North Carolina is a continuing and growing problem. As educators examine where to put their emphasis, Willet and Singer (1991) argue that dropout research should focus on the "when" of dropout rather than just the "whether." It is not simply enough to look at the students who drop out of school; the authors argue that to make a difference, educators must thoroughly examine when students are leaving and try to prevent that from happening. One of the major ways that North Carolina educators can do this is by adopting early interventions for ninth graders that include literacy and learning strategies such as the ones that were developed at the University of Kansas (Fagella-Luby & Deshler, 2008).

Overwhelmingly, research is pointing more and more toward the ninth-grade year as the most important grade with regard to potential dropouts. Ninth grade has been referred to as "the pivotal year" (Black, 2004), the "make it or break it year" (Bridgeland et al., 2009), and even as "a minefield for the most vulnerable students" (Wheelock, 1993). Walt Haney, Professor of Education at Boston College and Senior Research Associate in the Center for the Study of Testing Evaluation and Educational Policy, in his

comprehensive research from 1970-2000, concluded that over this 30-year period, ninth grade had increasingly become a “primary bottleneck grade” and stated that this is where students get “stuck” and do not progress to become high school graduates (Neild, 2009). His research also concluded that 80% of students who fail to pass ninth grade would not graduate from high school (Black, 2004). Ninth-grade students exhibit higher rates of failure in courses, decline in test scores, and behavioral problems than students in all other grade levels (Cohen & Smerdon, 2009). One third of the nation’s recent high school dropouts never were promoted beyond ninth grade (Neild, 2009).

Many reasons have been suggested for why ninth grade is such a difficult year for students. There are contextual and developmental factors that often occur simultaneously and contribute to school problems for many students; also, students are taking a large institutional leap at the same time that they are undergoing many physical and emotional changes (Cohen & Smerdon, 2009). For example, students often do not attend high school with their middle school peers, they usually move into a new building, the options for taking courses and how to maneuver are much more varied and freer, the environment is less supportive than in high school, and often there are many teacher deficiencies such as lack of certification in the content area or lack of teaching experience (Cohen & Smerdon, 2009). On average, ninth graders attend high school with about 60% of their eighth-grade classmates (Neild, 2009). Not only do they lose a big portion of their peers in the move from eighth to ninth grade, but for 80% of ninth graders attending public schools in the United States, the eighth-to-ninth-grade move is a literal one, involving the switch from an elementary or middle school to a high school with a 9-12 structure (Neild, 2009). These transitions from a more structured and supportive middle school

environment to a larger and less structured high school can be extremely hazardous for many students (Cohen & Smerdon, 2009). Another suggested difficulty in this transition year is the dramatically increased competition in sports and in academics and the greatly expanded choices available; questions such as where to eat lunch and which courses to take can overwhelm many students (Cohen & Smerdon, 2009).

Another reason that has been documented is the lack of preparation that students receive before high school. Some studies indicate that most ninth graders at traditional urban high schools enter with academic skills several years below grade level, and that urban students who drop out have often encountered severe academic problems in ninth grade (Shore & Shore, 2009). Another assertion is that the teachers teaching ninth grade can make this transition more difficult. Many secondary-certified teachers are not prepared to teach students basic literacy and numeracy, since they are subject-area specialists that have no training in these areas whatsoever (Balfanz, McPartland, & Shaw, 2002). Ninth-grade teachers are also more likely to be "uncertified, new to teaching, and/or new to the school than those teaching upper grade students" (Neild et al., 2008, p. 547). Ninth-grade teachers are often reluctant to work with their students, because ninth grade is often viewed as the least desirable teaching assignment in high school (Neild et al., 2008, Owen et al., 2008).

Others point to students and parents at this age as contributing to difficulties in the ninth-grade year. Students become less engaged and pay less attention by the end of the ninth grade (Cohen & Smerdon, 2009). As they enter this pivotal year, students often have "concerns and anxieties" that contribute to less academic achievement and more problem behaviors (Oakes & Waite, 2009, p. 2). More than 40% of Chicago freshmen fail

a major subject during the first semester (Roderick & Camburn, 1999). Parents are also struggling with how to treat ninth-grade students, as the entrance to ninth grade may serve as a social marker signaling to parents that the young person deserves greater independence and to peers that the student is worthy of inclusion in the social activities of older adolescents (Neild, 2009)

Because of all of these factors, a student's experience in ninth grade is often the best predictor of whether or not a student will finish high school (Owen et al., 2008). The experience of the ninth-grade year contributes substantially to the probability of dropping out, despite controls for demographic and family background characteristics, previous school performance, and pre-high school attitudes and ambitions (Neild et al., 2008). Elaine Allensworth and John Easton obtained similar results in her research on students in Chicago public schools. They also found that freshman-year performance is a much better predictor of graduation than simple categorization of students based on their backgrounds (Allensworth & Easton, 2005).

Dropout prevention must focus intensively on Grade 9 to make a difference (Allensworth & Easton, 2005). Evidence is mounting that ninth graders who fail are the most important group to focus on, because they are at the most at risk for not graduating (Neild et al., 2008). Predictors such as attendance and whether or not a student is on track can accurately predict (with about 85% accuracy), by the first year of high school, whether or not a student will drop out of high school (Bridgeland et al., 2009). It is precisely this prediction and its accuracy that educators must tap into by focusing on the ninth-grade year.

The Importance of Being On Track

The evidence is clear that students need to be progressing towards a diploma and must be considered on track by the end of the ninth grade or they will have very low odds of earning a high school diploma (Neild, 2009). One longitudinal study found that first-time freshmen not promoted to the 10th grade had a dropout rate of close to 60% compared to a rate of less than 12% for students who were promoted. Among those who spent more than one year as ninth graders, only 20% completed high school in six years (Neild et al., 2008). In Princiotta and Renya's (2009) study of students in Philadelphia, 80% of eventual dropouts were indentified by the end of the ninth grade. In Allensworth and Easton's (2005) important study of the Chicago public schools, the authors defined students as on track at the end of their freshman year if they had accumulated five full course credits (the number that is needed to be promoted to 10th grade in Chicago public schools) and if they had no more than a one-semester grade of F in a core subject. The authors combined numbers of credits and number of F's in core subjects. The core subjects are important because they are part of the formula that determines whether students move forward in high school. If the only classes students pass are electives, they will never graduate from high school. In Philadelphia, one third of the dropouts were still considered ninth graders, credit-wise, even though most had been enrolled in high school for several years; an additional 25% had earned only enough credits to be classified as 10th graders (Neild, 2009). Many educators have the misperception that demographic and poverty information are major determinants of future dropouts; Allensworth and Easton's work shows that "gender, race, and economic status are important, but all of these factors together explain only about 12% of the variation in

graduation rates in the cohort of students entering [Chicago public schools] in 2000-01 school year. In contrast, students' freshman-year GPA and number of F's explain 39% of the variation in graduation rates" (Allensworth & Easton, 2007, p. 8).

Allensworth and Easton (2005) found that students who got off track during the ninth grade had a 22% on-time graduation rate, compared with an 81% graduation rate for students who were on track after their first year in high school. In New York City's Class of 2003, approximately 30% of the students who did not graduate in four years had earned no more than one quarter of the credits needed for graduation (Neild, 2009). This deficit they have created for themselves puts them behind and much less likely to graduate from high school.

Other states, researchers, and school systems have similar, but slightly different, requirements for what are considered on track. Neild (2009) uses this definition: "The most basic definition of being off track for graduation is not having earned sufficient course credits in the normally allotted time" (p. 19). Regardless of the specifics of the definition, the research states that students are at vastly more risk of not graduating from high school if they are not sophomores by the end of their first year of high school (Owen et al., 2008).

In Cabarrus County Schools, students must pass English I and get five other credits to become a sophomore. Just as the other studies indicate, in North Carolina, making it to 10th grade by the end of the first year of high school is crucial (Owen et al, 2008). "If we can get these students to 10th grade with the appropriate number of credits, their chances of graduating go up significantly" (Owen et al., 2008,p.26). In Cabarrus

County Schools, failing English I will automatically place students in the off-track category, because the student cannot be promoted without passing the course.

Importance of Attendance

Other research has found that a major part of staying on track and graduating is attendance. Attendance rates have proven to be a reliable predictor of the risk level for not graduating from high school (Stanley & Plucker, 2008). "Neild and Balfanz have shown that attendance and failure in eighth grade can be used to predict eventual dropout" (Allensworth & Eason, 2007, p.40). A student's attendance patterns are the most accurate indicators that a student is falling behind academically and may drop out. Research from at-risk youths in Colorado showed that 80% of high school dropouts were chronically truant in the year before dropping out (Bridgeland et al., 2009). The primary reason that students fail a course in high school is because they do not attend classes (Roderick & Camburn, 1999). To stay on track, students must be at school. Attendance is the most important determinant of passing classes and graduating from high school (Allensworth & Easton, 2007). Even one week of absence per semester substantially increases the likelihood of failing a class (Allensworth & Easton, 2007).

While socioeconomic status and intelligence are important, they are not always good predictors of success in high school. Attendance patterns are the most accurate indicators of success in high school. Even students who have performed below average academically are not necessarily more at risk of dropping out of high school. Course attendance is eight times more predictive of course failure in the freshman year than eighth-grade test scores (Allensworth & Easton, 2007). Many eventual dropouts have attendance problems before they ever enter high school. A study in Philadelphia

indicated that approximately 50% of the eventual dropouts could be identified on the basis of poor grades or attendance, or both, before entering high school (Neild, 2009).

There are many suggested reasons why attendance is such a problem for many students. Like many other issues related to high school dropouts, ninth-graders attend high school at the lowest rates of any grade level. Only 78% of ninth-graders attend school on a regular basis (Black, 2004). Many reasons have been offered for why students attend school less in ninth grade, such as developmental, adjustment, and social causes. Attendance is critical to one's chances of dropping out of high school because of the link to failure. As Owen et al. (2008) put it, "There is good reason to believe that last year's truant is this year's dropout" (p.20). Absences clearly have a negative effect on students and their performance. One of the major reasons is that teachers' grading policies often incorporate absences-and even when absences are not an actual part of the grade-grades are often negatively affected by absences (Allensworth & Easton, 2007). One way or the other, the absences put the students on a negative path. Neild et al.'s (2008) Philadelphia study found that "ninth grade course failure and attendance have a substantial impact on the probability of dropping out within six years of starting high school" (p.545).

Importance of an Intervention for At-Risk Students

Since the ninth-grade year is so important for student success, it stands to reason that this is the most important time for at-risk high school students to have an intervention. Educators must be proactive by paying attention to the high school transition and to intervening early to promote academic recovery (Roderick & Camburn, 1999). This transition from middle to high school and making sure those students

succeed in and move through the ninth grade is a focus that many reformers have identified as necessary (Cohen & Smerdon, 2009). “Educators should establish programs which identify at risk and struggling students early, ideally in middle school or no later than the student’s freshman year of high school” (Stanley & Plucker, 2008, p.9). The evidence has mounted that there needs to be an early and successful high school intervention if students are going to be successful (Cohen & Smerdon, 2009). If we know that students are more at risk, and we want them to break certain patterns that can derail their graduation, this is the time for a major intervention to minimize their risk of dropping out of high school (Neild et. al., 2008). Once schools understand the need for an intervention, they must examine their students and decide how best to intervene. One of The National Middle School Association’s key actions is “providing targeted early intervention for failing students” (Oakes & Waite, 2009, p. 2).

School systems should develop district-wide and/or statewide early-warning systems to help identify students at risk of dropping out and to develop the mechanisms that trigger appropriate supports for these students (Bridgeland et al., 2009). Waiting until students fail and are off track is a mistake. Allensworth and Easton (2005) contend that schools and districts must “identify students who are likely to fail before they actually fail” (p.16).

Once these students have been identified, schools need to provide an intervention that incorporates the importance of the ninth-grade year, the importance of tracking attendance during the ninth-grade year, and the importance of students being on track at the end of their ninth-grade year. One major part of any responsible plan is intervening

early and deciding how to redirect the at risk students' energies toward the proper goals for graduation (Boutelle, 2010).

Another major part of a proper intervention is to make sure that the teachers working with these students actually want to work with them and help them succeed. School systems need to begin by having teachers in place who want to work with ninth-graders to provide interventions and keep them on track academically. These teachers need to be supportive and caring adults who can help students navigate the difficult waters of growing up (Neild, 2009).

Along with caring about these students, the environment must provide closer monitoring of attendance and progress for their in-class work (Allensworth & Easton, 2005). A teacher who is working with them in a smaller environment can provide the type of monitoring and personal attention that keeps students involved and engaged with school. This type of environment can ensure that critical systems are put in place to monitor students so that educators, parents, and the students themselves can be notified to ensure timely and effective interventions when they begin missing school or missing assignments (Bridgeland et al., 2009).

Reading and Literacy Interventions

Often schools and districts permit students to get behind before schools start working with them. Once students have completed one or two semesters and have been unsuccessful, schools often place them in remedial courses, hoping they will catch up with their peers. There are also many problems with remedial courses. The remedial course can often be designed in a very generic model to serve all students. When these remedial courses make students repeat information from the beginning, they often get

very frustrated instead of getting the assistance that they need (Greenleaf, Schoenbach, Cziko, & Mueller, 2001). Instead of using this model, many reformers are using effective models that prepare students by giving them specialized classes in addition to their standard classes. These classes are designed to enable students to succeed in standards-based, college-preparatory classes (Balfanz et al., 2002).

Because of the strong link between freshman-year course performance and eventual graduation from high school, it is important to choose interventions and strategies that will help students in their overall success (Allensworth & Easton, 2007). One of the major keys in developing these interventions is to focus on the freshman transition year and the importance of getting off to a good start in high school (Neild et al., 2008).

Adolescent literacy is one of the major deficits found in students who are at risk for dropping out of high school. The greatest need in this area is to develop reading comprehension and fluency (Jetton & Dole, 2004). This is not just a regional or school level problem. Campbell, Hombo and Mazzeo's work (2000) has found that significant numbers of entering high school students have weak or limited reading comprehension skills.

Some researchers have referred to intense literacy instruction for students as ensuring that the students have a "double dose" of English to supplement their deficiencies and help students be successful in their first year of high school. These courses in English work with students on strategic reading skills for success (Neild et al., 2008). In one major study involving Talent Development High Schools, this type of ninth-grade instructional program, which uses "double dosing" to help students succeed

has shown very promising results (Balfanz et al., 2004). Because research has shown that eight million students in Grades 4-12 read below grade level, students should be engaged in ongoing literacy programs in middle and high schools, and subject-matter teachers should incorporate literacy strategies in their course materials (Bridgeland et al., 2009).

Self-Regulated Learning Strategies

Research on students' self-regulation of learning and its effect on performance has been going on for several decades, with a majority of the research involving younger elementary students (Zimmerman, 2008). Teaching students to understand and regulate what they need and why they need it is a great skill for students to master so they can continue to learn throughout their lives. Federal agencies like the National Institute for Child Health and Human Development have also been making investments in reading characteristics and practice that yield positive outcomes (Faggella-Luby & Deshler, 2008).

This is important research, but it leaves many older students without research-based options that can help them be successful. In many ways, the problem becomes more significant as students get older because the stakes become more important. Because secondary students do not have as much time before they graduate or drop out, interventions need to produce significant gains—and in a short period of time (Faggela-Luby & Deshler, 2008). This problem continues to grow; 68% of secondary students are below grade level in reading and 26% of eighth-grade students cannot read material essential for daily living (Perie, Grigg, & Donahue, 2005). Students must have successful interventions that can make them better readers and self-advocates so they can be successful high school students.

Zimmerman (2008) has documented a historical perspective and overview of the benefits of learning strategies for students. He outlines some areas that still need to be developed. He contends that there are still questions that need to be answered about whether self-regulated learning strategies are linked to improvements in overall student achievement and whether teachers can change the classroom environment to help students use these strategies in the classroom.

While the extensive research that has been done on these skills is important and significant, there are some very substantial holes that need to be filled. Most of the literacy research that has been done has involved younger students and has focused on phonemic awareness and decoding skills and not on how to keep students on track, receiving credits, and not dropping out of high school (Faggella-Luby & Deshler, 2008).

An Intervention Model: Learning Strategies from the University of Kansas

One research group, the University of Kansas Center for Research on Learning (KUCRL), in seeking to help students succeed--despite many of these literacy and task completion deficiencies--developed The Learning Strategies Curriculum (Boudah and O'Neill, 1999). These strategies were developed primarily for students with known learning disabilities, but the research still suggests that students who use these learning strategies will improve their performance (Boudah & O'Neill, 1999). These learning strategies are probably the most researched and developed approach to direct strategy teaching for students (Lenz, Ellis, & Scanlon, 2006). The learning strategies are even more important for adolescents, because this is one of only a few initiatives that have focused on adolescents in secondary schools. One effective model for helping adolescent

students is the Strategies Intervention Model (SIM), which was developed by a group of researchers at the KURCL (Lenz et al., 2006).

The researchers at KUCRL have broken down the expectations for learning into four separate categories: academic, social, motivational, and executive (KUCRL, 2009). Many students do not have these skills after they leave elementary and middle school, but KUCRL research assert that students must practice and master all four to be successful. Academically, must gain information from books and lectures and demonstrate this information on tests. Socially, students must follow rules and interact appropriately with adults and peers. Motivationally, students must know how to plan and carry out short-term and long-term goals. Executively, students must solve problems independently and generalize learning across situations (KUCRL, 2009). The Learning Strategies are created to help students in these four areas.

Academically, the researchers at the KUCRL assert that at-risk learners reach an achievement plateau during the secondary school years-which is when they begin to have the most troubles that they cannot overcome, have difficulty finishing assignments, and have ineffective, if any, study routines. They cannot organize information and cannot distinguish what is important from what is not important (KUCRL, 2009)

Socially, these students score significantly lower (the same as juvenile delinquents) on a test of social skills. They have discovered that these students do not participate in discussions and often break the rules that exist for behavior. They have found that the students are less active in school and during out-of-school activities and that they often cannot recognize when they should use social skills (KUCRL, 2009).

Motivationally, these same at-risk learners have significant deficiencies in how and why to become motivated. They often do not or cannot see the relationship between effort and success. They do not see a benefit from staying in school. They do not make or keep commitments well. They also have severe trouble setting goals for the future and attaining the goals (KUCRL, 2009).

Executively, they simply cannot finish or finalize what they are working on and toward. They cannot invent successful strategies for completing tasks. They cannot generalize information and follow it to completion. They have severe difficulty learning how to solve problems. Lastly, they fail to take advantage of prior knowledge to face and conquer new problems (KUCRL, 2009).

The overall concept and goals for SIM intervention is to teach these at-risk students strategies for overcoming their deficiencies academically, socially, motivationally, and executively. The goal for the SIM intervention is for these strategies to promote and assist individuals so they can learn academically and work independently, exhibit and use appropriate social and personal skills, earn a high school diploma, and make successful transitions into various post-high school settings. It is precisely these goals and strategies for students at the secondary level that are lacking.

The intent of the strategies is that students who are deficient need to learn strategies to make sure they can be successful. Researchers have defined learning strategies very simply as "an individual's approach to completing a task…or an individual's way of organizing and using a particular set of skills in order to learn content or accomplish other tasks more effectively and efficiently in school as well as in nonacademic settings" (Boudah & O'Neill, 1999, p. 1). Using this philosophy, a teacher

instructs student on learning strategies so they can learn *how* to learn instead of teaching them only specific content.

Swanson and Deshler (2003) completed a meta-analysis of the findings related to strategies that produce a large effect size for adolescents. Their analysis states that the most important contribution of the meta-analysis was uncovering the key components of instruction. They state that students with learning disabilities are inefficient processors of information and that students with learning disabilities must be prompted to use certain strategies for them to be effective (Swanson & Deshler, 2003). They concluded that the studies that combined two or more goal-oriented tactics were considered a form of strategy instruction and this form of teaching adolescents strategies for learning is how to improve their performance.

Because teachers have a very limited time to intervene and work with students who have significant deficiencies in high school, teachers must choose strategies that have a positive impact in a short amount of time. Explicit practice was one of the strategies that yielded higher effect sizes than most of the other strategies. Swanson and Hoskyn's (2001) analysis concluded that explicit practice was the only factor that contributed significantly to effect size (16%; Swanson & Hoskyn, 2001). Practicing ways to execute and finish tasks using SIM assists students and delivers a significant effect size.

Swanson and Deshler (2003) took the information from explicit practice and explained how it can be integrated into the SIM. They used the learning strategies from the University of Kansas because they concentrate on adolescents. It is the lack of

research on high school students that makes the Learning Strategies unique and important.

Results from a study using one SIM strategy, the Word Identification Strategy, showed that oral reading errors decreased while reading comprehension increased for all students on ability level and grade level materials (Lenz & Hughes, 1990). Another study revealed that students who used another strategy, the Test Taking Strategy, improved their test scores from 57% to 71% (Hughes & Shumaker, 1991).

Even though there is little research in this area, it has increased over the past several years. Faggella-Luby and Deshler (2008) analyzed six literature reviews that they assert can provide a foundation for making policy and programming decisions for students who are struggling readers. These findings are summarized in Table 1.

Table 1: Strategies That Lead to Fluent Long-Term Application

Strategy	Benefit Gained
Targeted Instruction for Good Reading Skills	Learning to ID text structures Discover word meaning Tap prior knowledge Use cognitive strategies
Focused Reading Comprehension Instruction	Teaching cognitive strategies Teaching expository text structures Teaching narrative structures Increase task engagement Blend all four above
Cognitive Strategies Remembered Best and Used	Self monitoring Summarizing Story/grammar self questioning
Student Improvement Demonstrated	Elementary and secondary levels
Targeted Instruction Improved Student Learning	LD students targeted for failure typically achieving students

Table 1: (cont'd)

Targeted and Explicit Strategy Instruction	Accurately predicts outcomes

(Faggella-Luby & Deshler, 2008)

Fagella-Luby and Deshler (2008) state that there is no definitive information about the sequence that the strategies should be taught in, the weighting of each strategy, or how to implement, considering that these students did not benefit from these strategies in elementary school. Because there is not much research on the sequence in which strategies are best introduced, the teachers and presenters chose the strategies they preferred as they taught the students. Because these students are older and have received strategies that may not have worked in the past, the authors include a bridging strategy that includes this form of instruction and also provides language comprehension and reasoning (Deshler & Hock, 2007). They argue this will work better with these older and struggling students.

Fagella-Luby and Deshler (2008) also state that while the "fidelity" of a program is often looked at but that the "dosage" of the interventions has often been ignored. They go on to argue that fidelity may not necessarily be that important if it only gets taught a few times a week when it should be taught daily. They believe this can and will compromise the results of the interventions. They also discuss the length of the intervention and the size of the group in which students receive this intervention. Increased group size can lead to diminished student outcomes, because more students in the class lead to fewer opportunities for feedback that is instructive and corrective (Torgesen et al., 2001).

Lenz, Ehren, and Deshler (2005) discuss a content literacy continuum, which is a service delivery model where students receive intensive, systematic, explicit instruction on content, strategies, and skills across five levels of this continuum, as described in Table 2.

Table 2: Levels of the Content Literacy Continuum

Level	Title	Description
Level 1	Enhance Content Instruction	Mastery of content regardless of literacy levels
Level 2	Embedded Strategy Instruction	Routinely weave strategies within and across classes using large group methods
Level 3	Intensive Strategy Instruction	Mastery of specific strategies using intensive-explicit instructional sequences
Level 4	Intensive Basic Skill Instruction	Mastery of entry literacy skills at fourth grade level
Level 5	Therapeutic Intervention	Mastery of language underpinnings of curriculum content and learning strategies
Tutoring	Strategic Tutoring	Extending instructional time through before-or-after school tutoring

Lenz, Ehren, & Deshler (2005)

This model also rewires the coordination between the teacher performing the intervention and other teachers who are working with the students. Fagella-Luby & Deshler (2008) argue that the model is not powerful unless there is "deliberate coordination by teachers across the various levels of the continuum" (p. 76). They argue that Learning Strategies, if they are to be effective, require even more coordination for these students to actually change as learners, which is the ultimate goal. The authors describe it very succinctly when they call the overriding goal of the CLC "an

instructional synergy across the levels within the continuum in which all the teachers recognize they have an important role in enhancing the literacy skills of students" (p. 76).

Eleven strategies were directly beneficial to high school English students who were enrolled in High School Success in Cabarrus County Schools. An explanation of each, what it provides for the students, and research results are summarized in Table 3.

Table 3: Learning Strategies Used, Benefits, and Research Results

Learning Strategy	Provides for Students/Teachers	Research Results
Word ID Strategy	A way to decode and ID unknown words	Students reduced their errors over 80% on a 400 word reading passage and comprehension increased 30% on grade-level passages
Self-Questioning Strategy	A way to help them provide themselves motivations for reading	Students had average gains of 40% in reading comprehension on grade-level materials
Visual Imagery Strategy	A way for students to create mental movies of narrative passages	Students had a 51% improvement in comprehension and recall
Inference Strategy	A way to improve comprehension improving their ability to respond to inferential questions	Students scored significantly better on standardized reading assessments
Fundamentals of Paraphrasing and Summarizing	A way to identify and paraphrase main ideas and details	Students performed 22.9% better on pre-test and post-test comparisons
LINCS Vocabulary Strategy	A way to learn new vocabulary Words using memory-enhancement	Students improved 24% from pre- to post-test compared to a decrease for control group
Sentence Writing Strategy	A way to recognize and write sentence patterns	Students improved 33% from pre- to

Table 3: (cont'd)

		post-test on percent of complete sentences
Test-Taking Strategy	Ways to allocate time and priorities on tests, focus on important elements, recall information, progress through the test, make well informed guesses, check work, and take control of testing situation	Students achieved an average 10-point increase on tests
SLANT (Starter Strategy for Class Participation)	Ways to use appropriate posture, track the talker, activate their thinking, and contribute	N/A
Unit Organizer Routine	Ways to plan units, introduce and maintain big ideas in units, and show how units, critical information, and concepts relate	Students of teachers who used the routine scored an average of 15% higher on unit tests
Lesson Organizer Routine	Ways to plan lessons and introduce and connect ideas to the unit and the course	Students of teachers who used the routine scored an average of 15% higher on unit tests

Summary

Students quitting high school before they graduate is a major national problem and a problem for students in North Carolina (Gottlob, 2007; Neild et al., 2008). The significance of the problem is illustrated by the money that the federal government and the states are directing towards dropout prevention efforts (Almeida et al., 2010). As different states and groups examine this problem, they are collectively looking for interventions and methods that can and will prevent students from dropping out of high school. The majority of these students who are considered at risk for dropping out have significant deficiencies and can benefit from help with their reading and comprehension skills (Jetton & Dole, 2004).

In Cabarrus County Schools, the high schools have provided an intervention for the students who began high school at risk for dropping out because they were not reading at grade level, according to the NCEOG test for reading in Eighth Grade. Since the students had entered high school and were not reading at grade level, they were placed in a class called High School Success, where they received the SIM intervention in a small setting during the same semester they were enrolled in English I. The students received at least 30 minutes of the SIM intervention each day. The rest of the class instruction focused on supplementing the work that was done in the English I class and also keeping students current with their homework assignments and with class work. This intervention provided support that, ideally, prevented them from dropping out of school because it was delivered early in ninth grade, it kept them on track, it improved their attendance because of the relationship with and support of the teacher, and it gave them strategies for being successful in their other classes.

CHAPTER 3: METHODOLOGY

Introduction

For this study, a mixed-methods approach was used to provide quantitative and qualitative data to address the research questions outlined in Chapter 1. There are several different benefits to using more than one method. For example, it allows the researcher to draw on the benefits of each method (Wiersma & Jurs, 2008). Advantages of using a mixed-methods approach are that it appeals to different audiences, it enables the researcher to look at the data from a variety of perspectives, and it addresses multiple questions (Wiersma & Jurs, 2008). The effects of High School Success were explored both quantitatively and qualitatively. The quantitative data measured student achievement, student pass rates in English I, attendance rates, and dropout rates. The qualitative data identified the similarities and differences in the experiences of the students who were enrolled in High School Success, the teachers who taught the High School Success class, and the professors who taught the teachers the strategies.

Research Questions

The research questions were shaped by the quantitative and qualitative methods that were used. Using the analysis of the outcomes of the NC English I EOC, student pass rates in English I, student attendance rates, and student dropout rates, the quantitative portion of the study seeks to answer the following research questions:

1. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as defined by student performance on the NC English I EOC?
2. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by the student pass rates in English I?
3. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as defined by student-attendance rates during the semester they were enrolled in High School Success?
4. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by dropout rates?
5. Was High School Success a successful intervention in the schools, as defined by interviews with students, teachers, and professors?
6. What are the perceptions of students, teachers, and professors of High School Success and its effect on NC English I EOC scores, student pass rates, and attendance and dropout rates?

Hypotheses

The hypotheses tested in the quantitative portion of the study that relate to the quantitative research questions are:

Ho^1. There is no significant difference in NCEOC English I scaled scores for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ha^1. There is a significant difference in NCEOC English I scaled scores for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ho^2. There is no significant difference in NCEOC English I level scores for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ha^2. There is a significant difference in NCEOC English I level scores for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ho^3. There is no significant difference in English I pass rates for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ha^3. There is a significant difference in English I pass rates for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ho^4. There is no significant difference in attendance for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ha^4. There is a significant difference in attendance for students were enrolled in High School Success and students who were not enrolled in High School Success.

Ho^5. There is no significant difference in the probability of dropouts for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Ha^5. There is a significant difference in the probability of dropouts for students who were enrolled in High School Success and students who were not enrolled in High School Success.

Research Design

This research design used a QUAN-Qual explanatory mixed-methods approach that integrates quantitative and qualitative components (Gay, Mills, & Airasian, 2006). There are several identified benefits of a mixed-methods approach, such as avoiding unimethod bias, appealing to different audiences, enabling the researcher to look at the information from a variety of perspectives (Wiersma & Jurs, 2008). The quantitative design helped the researcher determine whether statistically significant differences existed between students enrolled in High School Success and students who were not enrolled in High School Success with respect to achievement, student pass rates, attendance, and dropout probability. The qualitative design helped the researcher get a more in-depth view of the effectiveness of the High School Success class from the perspectives of participating students, teachers, and professors.

Phase I of the research consisted of quantitative data collection at each school. The students in the study were not selected at random, so this was a quasi-experiment (Wiersma & Jurs, 2008). The students were purposefully chosen because they entered the ninth grade below grade level as determined by the NC Eighth Grade Reading EOG test. All students who were not labeled as learning disabled or with limited proficiency in

English and were considered below grade level by their score on their NC Eighth Grade Reading EOG were placed into a class called High School Success, where the students received the SIM and support for their English I class. This is considered purposeful sampling because the students were chosen due to their earlier school performance, not randomly (Wiersma & Jurs, 2008).

The qualitative portion of this research was based on an interpretivist perspective with a phenomenological approach. This approach was well suited to addressing research questions pertaining to the human experience and has a foundation in the disciplines of psychology and education (Creswell, 2005). This approach stresses the description of phenomena from the perspective of those experiencing it (Wiersma & Jurs, 2008). If behavior is observed, a phenomenologist does not just note the behavior, but rather attempts to understand what the behavior means to the persons being studied (Wiersma & Jurs, 2008). It was important to discover what this behavior meant to the students, teachers, and professors who participated in this project.

The quantitative data were collected at each school site and consisted of student achievement on the NC English I EOC test, student pass rates in English I, dropout rates, and attendance rates. High School Success was used with all students who were determined to be below grade level by the North Carolina Eighth Grade Reading EOG and who are not considered learning disabled or as having limited proficiency in English. Comparisons were made between four semesters' worth of students who were below grade level and not identified as having learning disabilities or limited proficiency in English who were not enrolled in High School Success and four semesters' worth of students who were below grade level and not identified as having learning disabilities or

limited proficiency in English who were enrolled in High School Success. Four semesters' worth of data were chosen because the High School Success class has been in place for four complete semesters. It was determined that the best information about High School Success would be gleaned from examining data from these first four semesters.

The qualitative data collection consisted of in-person structured interviews with the students who had taken the course, teachers who had taught the students, and the professors who were involved with High School Success. These were all individual interviews, with each participant, conducted at different times. Interviewing all of the participants was important because it was necessary to discover their perceptions of the effectiveness of the program. The qualitative data obtained elaborated on the quantitative data collected (Gay et al., 2006).

Internal and External Validity

Licensure status and certification status are controlled, as all teachers were licensed and fully certified in English. There are some threats to internal validity. Teachers were aware that students were being assessed. This was a threat to the internal validity because some of the teachers may have felt uncomfortable about their performance being monitored. To address these limitations, participating teachers were told that their supervisors analyzed their results and that results from their students' performance would not be used for teacher evaluation. Teacher experience was another threat to the internal validity of the study. Teacher experience is not controlled, and therefore may have had an impact on student achievement on the NC English I EOC and

on student pass rates in English I, since the experience levels among the teachers varied from two years to 20 years.

Class size and student demographics may have also contributed to the outcomes of the study. Each teacher had different class sizes each day. No teacher had a class with more than 15 students, but the same teacher may have had five students in one period and 13 in another. Class size may have had an impact on the results because the teacher may have been able to give the students more attention in one class than in the other. Also, a school with more students who were served by the High School Success class may have served more students than another high school. For example, one school may have served 75 students a year and another only 50 to 60 students. Just as class size can be significant for the amount of time spent with each student, an overall lower number of students for one teacher at one school could significantly affect the amount of time and intervention that each student received from the teacher.

This study was limited to a specific sample of teachers in seven high schools in one district in southwestern North Carolina. Multiple school districts in North Carolina were not included. Therefore, consideration cannot be given to the differences among teachers and students in various districts.

The assumptions and preliminary beliefs about the sample of students is that they represented a homogeneous group (e.g., they lived in the same county and they were not classified with learning or other disabilities that could limit their performance on the NC Eighth Grade Reading EOG test.). Even though all participating students fell into this category, there are different reasons that could have affected their performance, such as attendance. In other words, all students were not equal and could vary widely within the

sample because their selection in the program was based solely on their performance on the Eighth Grade EOG test.

Participants and Setting

This study consisted of two comparison groups and two treatment groups. The comparison group consisted of high school students who fit the criteria in 2007-2008 and 2008-2009 for their performance on the North Carolina English I assessment, student pass rates in English I, attendance rates, and dropout rates. The treatment groups consisted of high school students meeting the same criteria in 2009-2010 and 2010-2011.

The participants were students from seven traditional high schools located in Cabarrus County, North Carolina. The students who participated in the study were all students who took the NCEOG in Eighth Grade Reading and were determined to be below grade level. The students were all students who were not proficient on the exam but also had not been labeled with a learning disability in Reading. The teachers were all certified as traditional English teachers, and until this program began, had only taught traditional English classes at their high schools. All of the teachers received training in the KUCRL Learning Strategies and the SIM intervention over the course of one school year in once-a-month, all-day training sessions provided by two professors from a local university. They all received the same amount of training in the same delivery sessions.

Students were enrolled in a course titled High School Success for the same semester that they were enrolled in English I. The teachers taught the SIM and supplemented the English class during the course titled High School Success. Students were judged by their performance on the NCEOC Test for English I, student pass rates in English I, student attendance rates, and student dropout rates. In their High School

Success class, they used the SIM for 30-45 minutes each day. The intent of the SIM was that students who are deficient needed to learn strategies to make sure they were successful. Researchers have defined the SIM interventions as an approach to finishing a task or an individual's way of organizing and using skills to learn content or accomplish tasks more effectively and efficiently (Schumaker & Deshler, 1992). A teacher uses the SIM model so that they can teach students how to learn instead of specific content. In High School Success, teachers combined both of these elements for maximum student success. Teachers taught the SIM intervention for 30-45 minutes and for the remainder of the period; they supplemented the English I coursework and made sure students kept up with homework and assignments.

Teachers were trained in one Learning Strategy each month over the course of one school year. The instructors were two professors at a large urban university in an adjacent county to Cabarrus County Schools. These professors taught the basic philosophy behind the SIM initially and then decided which Learning Strategies to teach each month as the teachers came back and requested what they thought their students needed to be successful. The teachers were taught the Word Identification Strategy, the Self-Questioning Strategy, the Visual Imagery Strategy, the Inference Strategy, the Fundamentals of Paraphrasing and Summarizing Strategy, the LINCS Vocabulary Strategy, the Sentence Writing Strategy, the Test Taking Strategy, the SLANT Strategy, the Unit Organizer Routine, and the Lesson Organizer Routine. Students received instruction in one of these strategies for at least 30 minutes each day.

Throughout the semester, these students received the SIM in the High School Success class while they were also taking their English I class. The SIM intervention was

used with each student each day to help them be successful in English I. The teachers met with the researcher each month to discuss how the program was going and to ensure fidelity to the program. The two professors also continued to support and correct the teachers as they tried to ensure fidelity to the strategies and the tracking of the classes and students' performance on literacy tests and grades in English I. As stated earlier, to control the teacher variable, all of the teachers had the same instruction with the same instructors for this process. The school district in this study paid for the training for the teachers and coordinated it so that the teachers would be as consistent in approach and design of the class and classroom as possible.

The treatment period for this study was chosen based on the district's school calendar, which is broken into two different schedules for high schools. For this study, the treatment period will be during one semester-long course in which the student is enrolled concurrently with English I. This is based on a 4x4 high school schedule calendar, which provides two different sets of semester long courses each year. Under this 4X4 schedule, students take four 90-minute classes for the fall semester and then begin four new 90-minute classes for the spring semester. A student takes a total of eight classes in a school year.

Participant rights

The researcher is a district administrator in the school district that sponsored the study. The researcher has been a district-level administrator in this school district for six years and has worked as a teacher, school administrator, and district administrator for 18 years. The teachers in the study were informed that they were participating in the study. The students were not identified by name or by identification number. The building

administrators at the participating schools received a cover letter explaining the study. The study did not require administrative participation in the study.

The eligibility criteria for study participants were students who did not perform at grade level on the NC Eighth Grade EOG assessment, were not receiving special education services, and were enrolled in a course called High School Success. This study required an investigation of four semesters' worth of students who were not enrolled in High School Success and another four semesters' worth of students who were enrolled in High School Success. All seven of the participating teachers went through the same Learning Strategies Intervention training, with the same instructors, at the same time. The class sizes could differ from school to school and class to class, as they were determined by the students' other course selections. This study analyzed results from seven different high schools and seven different teachers.

Operational Definitions of Variables

Dependent variables: The dependent variables are student achievement (scaled scores, leveled scores, and student pass rates) and dropouts. The NC English I EOC test measures student achievement. The range for the scaled scores is 119-176, which converts from a raw score of 0 to a raw score of 56, since there are 56 questions on the test. A raw score of 0 equals a 119 and a raw score of 56 (which would be all questions answered correctly) is 176. The dependent variable was also measured using the same NC English I EOC test, but with leveled scores. Each achievement level has a scaled score that corresponds to the level assigned for the test. Level I is $\leq$ 137, Level II is138-145, Level III is 146-156, and Level IV is $\geq$ 157. The dependent variable was also measured using the pass rates of students in English I. Students were considered to be

passing if their course average in English I was 70 or above and they were considered to be failing if their course average in English I was below 70. A student was coded 1 if the student's course average was a 70 or above in their English I course. A student was coded 0 if the student's course average was below 70 in their English I course.

Dropout information was collected from NCWISE. A student was coded as 1 if the student was no longer enrolled in school. A student was coded as 0 if the student was currently enrolled in school.

Independent variables: The independent variable in the quantitative portion of this study was the program attendance status. Students who were enrolled in High School Success were coded as 1 and students who were not enrolled in High School Success were coded as 0. Female students were coded as 0 and male students were coded as 1. For student ethnicity, White students were coded as 0 and students of other ethnicities were coded as 1 in direct comparison with White students for the logistic regression. For MANCOVA, White students were coded as 0, Black students were coded as 1, Hispanic students were coded as 2, and students of other ethnicities were coded as 3.

Data Collection

Quantitative data collection

The study included students who had not been classified as learning disabled or with limited proficiency in English but did score below grade level on the NC Reading EOG test. "Below grade level" was defined as a score of Level I or a Level II on the NC Reading EOC, as Level III is considered at grade level and Level IV is considered above grade level. The study compared the NC English I EOC scores from this group of students in years 2007-2008 and 2008-2009 who were not enrolled in High School

Success with the NC English I EOC scores from this group of students in years 2009-2010 and 2010 -2011 who were enrolled in High School Success during the same semester that they were enrolled in the class.

The sampling method that was used was purposeful sampling, because the students were included and excluded based on whether they meet certain criteria. They had to be below grade level according to the NC Eighth Grade EOG Reading Test, and they also could not be considered learning disabled or with limited proficiency in English. If they were above grade level in reading, learning disabled, or had limited proficiency in English, they were excluded. Only students from these seven high schools that were below grade level in reading and not learning disabled were included in the study for both the treatment group and control groups.

The sampling method was also convenient sampling, because the researcher is a district administrator in this school system. The researcher had easy access to the students, the teachers, and the student data. As a district level administrator supervising dropout prevention initiatives, the researcher had a vested interest in the success or failure of the program. This vested interest and convenient sampling method allowed for possible bias, since the researcher was a familiar, district-level administrator in the school district and the teachers were aware of the researcher's position and interest in the success of the program. Throughout the research process, the researcher remained aware of this and reassured teachers that the results of the research could not negatively affect them or their positions. The success or failure of the program did not rest with the teachers; the researcher reassured the teacher participants that the study was being done to find out the best possible methods for student success. If the study and intervention

were not successful, the researcher wanted that information-the truth was vitally important and honest teacher input was equally important. Teachers were reassured at all points in the study, and especially at the beginning of their involvement, that honest feedback was critically important and that there could not be any ramifications for teachers who provided negative feedback about any aspect of the study.

Qualitative data collection

1. Interview Participants

The 14 students, seven teachers, and two professors were all given pseudonyms to protect the confidentiality of the participants. The student participants were: Jimmy, a 15- year-old, White male who was unsuccessful in the class; Sally, a 15-year-old, White female who was successful in the class; James, a 15-year-old, Black male who was successful in the class; Linda, a 15-year-old, Hispanic female who was not successful in the class; Billy, a 16-year-old, White male who was not successful in the class; Jane, a 15-year-old, White female who was successful in the class; Dean, a 15-year-old Black male who was successful in the class; John, a 15-year-old, White male who was not successful in the class; Clark, a 15-year-old, Black male who was not successful in the class; Sarah, a 15-year-old White female who was successful in the class; Ashley, a 15-year-old Black female who was not successful in the class; Alice, a 15-year-old Black female who was successful in the class; Daniel, a 16-year-old, White male who was not successful in the class; and Denise, a 15-year-old, Hispanic female who was successful in the class.

The seven teachers were: Ms. Smith, a White female teacher with four years of teaching experience; Ms. Jones, a White female teacher with 10 years of teaching

experience; Ms. Williams, a White female teacher with 25 years of teaching experience: Ms. Davis, a White female teacher with 10 years of teaching experience; Ms. Brown, a White female teacher with 10 years of teaching experience; Ms. White, a White female teacher with 4 years of teaching experience; and Ms. Black, a White female teacher with 5 years of experience. The two professors were Dr. Green, a white male with approximately 10 years of experience as a professor, and Dr. Blue, a White female with approximately 25 years of experience as a professor.

The qualitative portion of the study consisted of interviews with participants. Each of the seven teachers recommended two students, one who had failed High School Success and was therefore deemed low achieving and one who had made an A in High School Success and was therefore deemed high achieving, for a total of 14 students. In addition, all seven of the teachers who taught the High School Success class and the two professors who trained the teachers were interviewed. The researcher conducted interviews with each participant that lasted approximately 15-20 minutes. The teacher and student interviews took place at their respective schools, and the interviews with the professors took place at their university. The following sample questions were used in the interviews, with all of the questions included in Appendix A.

Some sample student questions:

1. How did High School Success affect your school attendance?
2. How did High School Success affect your English I grade and/or EOC?
3. How did High School Success affect your grades in other classes?

Some sample teacher questions:

1. What effect did the class have on the students' attendance?

2. What effect did the class have on students' English I grades and/or EOC grades?

Some sample professor questions:

1. From your perspective, why would this class help student attendance?
2. From your perspective, why would this program help student English I grades and/ or EOC grades?

Instrumentation

According to the North Carolina Department of Public Instruction, the NCEOC assessments are used to demonstrate a student's knowledge of subject-related concepts as well as to estimate a student's mastery of particular content to be compared globally. The North Carolina Elementary and Secondary Act of 1984 enacted this set of assessments.

North Carolina Public School Laws further outline the legislation referencing the development of tests. According to Public School Law 115C-174.10, North Carolina testing programs shall "assure that all high school graduates possess the…skills and knowledge thought necessary to function as a member of society, provide a means of identifying strengths and weaknesses in the education process, and establish additional means for making the education system accountable to the public for results." Additionally, North Carolina shall:

> adopt a system of end-of course testing designed to measure progress towards selected competencies, especially core academic competencies, described in the Standard Course of Study for appropriate grade levels. With regards to students who are identified as not demonstrating satisfactory academic progress, end-of-course . . . test results shall be used in developing strategies and plans for assisting

those students in achieving satisfactory academic progress (NC Public School Law 115C-174.11).

By state law, students enrolled in English I are required to take the NCEOC assessment. As outlined in the legislation, the EOC tests are designed for two distinct purposes: (1) to improve student performance on mastery of the North Carolina Standard Course of Study, and (2) to hold schools systems accountable for educating children to a high level of mastery.

The third edition of the NCEOC Test of English I was administered for the first time in 2006-2007, beginning with the fall semester block. The North Carolina DPI has determined that decisions about students must be made based on test results that are reliable. It has determined that for any test results used to make decisions about individuals, it is desirable that they be reliable and have a reliability coefficient of at least 0.85 (Van Dyk, 2008). Coefficients based on the relationships among scores from individual items or subsets of items within a test that all accrue from a single administration of the test are known as the internal consistency coefficient ("Standards," 1985). An internal consistency coefficient, coefficient alpha, is the metric used to establish reliability for the NCEOC Test of English I (Van Dyk, 2008, p.48). "Internal-consistency reliability examines the extent to which the test measures a single basic concept. One procedure for determining the internal consistency of a test is coefficient alpha (α)" ("North Carolina," 2009). The coefficient alpha, also known as Cronbach's alpha, is the numerical value of reliability. (Huck, S., Cormier, W., & Bounds, W., 2008) states that alpha will generally increase as the intercorrelations among test items increase, and is thus knows as an internal consistency estimate of reliability of test scores. When

intercorrelation is maximized between the actual test items and the same construct, Cronbach's alpha is widely believed to indicate that test items are reliable and confident. The average coefficient alpha given for English I is 0.91. The English I Technical Manual states, "The English I test is highly reliable as a whole… it is important to note that the high degree of reliability extends across gender, ethnicity, LEP status, and disability" (Van Dyk, 2008, p. 49). Based on the Spearman-Brown Prophecy Formula, the coefficient alpha score for English I is 0.84. It has been determined that the NCEOC assessment for English I is reliable for this study.

Content validity was assembled into the NCEOC assessment during its development process. The NCEOC Test of English I has two sections: composition and textual analysis. North Carolina teachers and other educators wrote almost all of the items. A few of the items were written under a contract with a major testing company, but even that contract specified that half of those items had to be written by North Carolina teachers. All items were reviewed by at least two content-area teachers from North Carolina. North Carolina educators deliver the Standard Course of Study every day and are most familiar with the way students understand the material. They were chosen because they are the primary individuals who are in contact with the students every day in the classroom setting (Van Dyk, 2008).

Instructional validity

Teachers were asked to evaluate the following statements using a five-point scale, with 5 being "to a superior degree," and 1 being "not at all."

1. The test content reflects the goals and objectives of the English I curriculum.

2. The test content reflects the goals and objectives of the English I curriculum as it is taught in my school or school system.
3. The items are clearly and concisely written, and the vocabulary is appropriate to the target age level.
4. The content is balanced in relation to ethnicity, race, sex, socioeconomic status, and geographic districts of the state.
5. Each of the items has one and only one answer that is best; however, the distracters appear plausible for someone who has not achieved mastery of the represented objective.

Table 4: Summary of Results of NC Teacher Survey

Statement	Percent indicating superior or high degree
1	94.10
2	88.88
3	68.75
4	56.25
5	62.50

(Van Dyk, 2008)

"Table 4 shows the correlation between the English I EOC test and teachers' perceptions of the test. They are asked each of the five questions listed above the table and the majority of teachers feel that the test is aligned with the curriculum, test the curriculum, and that the test is a fair test. There are varying degrees of agreement, but for all questions, they agree that the test does match up with their expectations of a fair and well-written test" (Van Dyk, 2008, p.54)

Criterion-Related Validity

For the NCEOC Test of English I, teachers' judgments of student achievement, expected grades, and assigned achievement levels all serve as sources of concurrent validity. The Pearson correlation coefficient is used to provide a measure of association between the scaled score and the variables listed above. The correlation coefficients for the NCEOC Test of English I range from 0.51 to 0.69, indicating a moderate correlation between EOC scaled scores and their correlated associated variables (Van Dyk, 2008).

The table below provides the Pearson correlation coefficients for variables used to establish criterion-related validity for the NCEOC Test of English I as displayed in the English I EOC manual.

Table 5: Summary of Teacher Summary vs. Results

Comparison	Person Correlation Coefficient
Teacher Judgment of Achievement Level by Assigned Achievement Level	0.58
Teacher Judgment of Achievement Level by Expected Grade	0.69
Teacher Judgment of Achievement Level by Scale Score	0.61
Assigned Achievement Level by Expected Grade	0.51
Expected Grade by Scale Score	0.54

(Van Dyk, 2008, p.54).

The majority of students in North Carolina are deemed to be proficient and competent in challenging subject matter. The subject matter is relative to the NC Standard Course of Study and mastery is indicated by students' assignment to an

Achievement Level. According to the NCDPI ("North Carolina," 2009), "Performance standards, called Achievement Levels, are one way that scores on the North Carolina End-of-Course Tests are reported" (p.40). Six hundred and fifty teachers who were knowledgeable about the performance standards in North Carolina conducted Field tests. "Approximately 109,989 students were involved in the standard setting process statewide…[with 80% of the students . . . being categorized into one of the four achievement levels"] ("North Carolina," 2009, p.50). The four achievement levels developed to categorize students based on absolute achievement are listed as follows. Level I: Does not demonstrate sufficient master knowledge and skills in the subject matter to be successful at a more advanced level in the content area; Level II: Demonstrates inconsistent mastery of knowledge and skills in the subject matter and is minimally prepared to be successful at a more advanced level in the content area; Level III: Consistently demonstrates mastery of knowledge and skills in the subject matter and skills and is well prepared for a more advanced level in the content area; and Level IV: Consistently performs in a superior manner clearly beyond that required to be proficient in the subject matter and is very well prepared for a more advanced level in the content area.

The teachers assigned a level to each of the students as a predictor of how he or she would do on the test. For this administration of the test, teachers assigned 8.07% of their students to Level I, 22.55% of their students to Level II, 46.81% of their students to Level III, and 22.56% of their students to Level IV (Van Dyk, 2008). The teachers' predictive scores were relatively accurate. The teachers predicted 8.07% of their students would be Level I, and 10.48% of the students achieved at that level. The teachers

predicted that 22.55% of their students would achieve Level II, and 20.76% of their students did. The teachers predicted that 46.81% of their students would achieve at Level III, and 42.74% of them achieved Level III. Teachers predicted that 22.56% of their students would achieve Level IV, and 26.02% did. The teacher's predictions were very reliable for how the students will achieve.

Student scores on the field test were compared to the teacher's judgments concerning achievement during the assessment's inception. According to NCDPI (1996), the percentage of correct items on the test increased over the achievement levels, and students rated by teachers in the various level categories were placed accurately. Therefore, the validity of the NCEOC (NCDPI) assessment is sufficient for this study.

Data Analysis Procedure

Multivariate analysis of variance (MANOVA) was used to determine whether statistically significant differences exist between the students enrolled in High School Success and students not enrolled in High School Success with respect to achievement, attendance, and dropouts. A Chi-square test was employed to check the differences for achievement levels for the students. There was an ANCOVA analysis of the group that was enrolled in High School Success and the group that was not enrolled in High School Success to determine whether the intervention played a significant role in higher achievement for the treatment group, as determined by the NC English I EOC test and student pass rates in English I. The independent variable is the High School Success class. The dependent variables were the students' scaled scores and the students' proficiency levels. The covariants are the students' attendance rates and dropout rates (up until their current year in high school).

Logistic regression was used to determine whether the possibility of dropout differs between students enrolled in High School Success and students not enrolled in High School Success. An odds ratio is a ratio of the odds for dropout for one group (e.g., the treatment group) and the odds for dropout for another group (e.g., the comparison group). Odds are the ratio of probability of dropout and the probability of not dropping out. With a balanced coin, for example, p(heads) = p(tails) = 0.50. Therefore, the odds ratio of tossing a coin is 0.50/0.50 = 1. The Bayesian Information Criterion (BIC) was used to measure the goodness of the model (Pampel, 2000).

Responses from interviews were examined for similar and different categories. The responses were analyzed using thematic analysis, in which a codebook was created to keep a record of how patterns and themes are identified. This method of qualitative data analysis is based on grounded theory. Grounded theory states that the theory is grounded in the data and not on a preconceived idea or notion (Glaser & Strauss, 1967).

Summary

The purpose of this section was to describe the hypotheses, participants, procedures, design, and data analysis for this study. This mixed-methods study used descriptive research and inferential statistics to analyze the results from the NCEOC English I test and student pass rates in English I to analyze the research question. It also used qualitative analysis of the responses from students, teachers, and professors involved with the treatment. The target population was at-risk students who were not learning disabled and not reading at grade level at the end of their middle school experience. The research sought to obtain a sample of high school students who were not at grade level at the end of eighth grade. The control group consisted of students from

2007-2008 and 2008-2009 who were not at grade level and not labeled learning disabled at the end of eighth grade, and the treatment group consisted of students from 2009-2010 and 2010-2011 who were not at grade level and not labeled learning disabled.

The findings of this research are presented in Chapter 4. Chapter 5 presents the conclusions from the study, which will includes interpretations, implications, and applications for the results.

CHAPTER FOUR: RESEARCH FINDINGS

Introduction

As stated in Chapter 1, this study examined the impact of being enrolled in the High School Success class for a group of students as compared to a control group of students who were not enrolled in High School Success. Quantitative as well as qualitative data were collected. This chapter analyzes the data collected from the comparisons of students who were enrolled in High School Success and those who were not enrolled in High School Success. The analysis investigated each research question. The data were statistically analyzed to determine if enrollment in High School Success had a significant improvement effect upon student performance on the North Carolina English I End-Of-Course Test, student pass rates for English I, student attendance rates, and student dropout rates. This chapter is organized in terms of the following six specific research questions posed in Chapter 1:

1. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as defined by student performance on the NC English I EOC?
2. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by the student pass rates in English I?
3. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High

4. School Success, as defined by student-attendance rates during the semester they were enrolled in High School Success?
5. Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as determined by dropout rates?
6. Was High School Success a successful intervention in the schools, as defined by interviews with students, teachers, and professors?
7. What are the perceptions of students, teachers, and professors of High School Success and its effect on NC English I EOC scores, student pass rates, attendance and dropout rates?

The study first compares North Carolina English I End-Of Course Test results, student pass rates in English I, attendance rates, and dropout rates of students who were enrolled in High School Success with those students who were not enrolled in High School Success; it then examines the results of interviews with the participants in the study including 14 students (each teacher chose two students to be interviewed-one who had passed High School Success and one who had failed High School Success), seven teachers, and the two professors who taught the teachers the model.

Quantitative Data

Description of the Data set

The population of the students who were selected for enrollment in High School Success spanned two academic school years from 2009-2011. The students were selected based on their performance on the North Carolina 8th Grade Reading End of Grade Exam. If the students were not identified as learning disabled, not labeled as non-English

proficient, and had not failed ninth grade, they were enrolled in High School Success. The sampling pool started with all 8,515 students from all seven high schools in the district who were enrolled in the ninth grade for the four years of study (2007-2011). Out of these 8515 students, 1711 were not proficient on the eighth-grade reading EOG test over four years (2007-2011). Ten students were removed from the data because no eight-grade reading EOG scores were available. Students who were determined to be at grade level after re-testing opportunities were also not placed in High School Success. This reduced the sample size to 1,232. After removing students with limited English proficiency and students with learning disabilities, the sample size was reduced to 1057. There were 629 students in the group that was not enrolled in High School Success and 428 in the group that was enrolled in High School Success. Data from these students were used for analysis to answer the research questions because they were collected from the intervention group, which had received High School Success in the 2009-2010 and 2010-2011 school years, and the control group, which not received High School Success in the 2007-2008 and 2008-2009 school years. They were all considered not at grade level by the NC 8th Grade Reading EOG.

North Carolina introduced new scales for reading EOG in 2008 and used the test in 2009. Therefore, participants in this study took both the previous version (2007) and the current version (2008-2011). The old and new scales were different, so the old EOG test scores were transformed into new EOG test scores to make the scores comparable across years. The North Carolina population statistics of the new reading EOG test scores (M = 259.35, SD = 11.13) were used in the transformation process (North Carolina Reading Comprehension Tests Technical Report, 2009). All participant's c-scores (the

difference between the state average on the test and the student score) were used in the transformation process to a standardized score using the following formula: Transformed_New_Score = 259.35 + c-score*11.13. Table 1contains the descriptive statistics for each group of students classified by gender and ethnicity.

Table 6: Subgroup Comparison

	HSS (n = 428)				Non-HSS (n = 629)			
	Read	English	Absence	Dropout	Read	English	Absence	Dropout
Male	253.55	146.44	3.94	0.94%	252.19	145.35	4.92	10.76%
n_{HSS} = 213	(6.71)	(5.39)	(5.02)		(7.92)	(6.36)	(6.44)	
$n_{non\text{-}HSS}$ = 344								
Female	254.94	147.56	4.91	1.40%	253.50	146.40	5.36	6.67%
n_{HSS} = 215	(6.14)	(4.93)	(4.65)		(8.30)	(6.69)	(7.07)	
$n_{non\text{-}HSS}$ = 285								
White	254.58	147.27	4.75	2.15%	254.18	146.95	5.30	10.53%
n_{HSS} = 186								
$n_{non\text{-}HSS}$ = 323	(6.90)	(5.54)	(4.80)		(8.21)	(6.59)	(6.00)	
Black	253.74	146.60	4.07	0.70%	251.80	145.04	4.37	5.85%
n_{HSS} = 142	(6.31)	(5.07)	(5.38)		(7.27)	(5.83)	(6.70)	
$n_{non\text{-}HSS}$ = 171								
Hispanic	254.35	147.09	4.80	0.00%	249.87	143.49	5.95	10.00%
n_{HSS} = 67	(5.86)	(4.71)	(4.47)		(8.51)	(6.84)	(8.73)	
$n_{non\text{-}HSS}$ = 110								
Other	254.28	147.03	3.42	0.00%	254.34	147.08	4.28	4.00%
n_{HSS} = 33	(5.78)	(4.64)	(3.28)		(6.89)	(5.52)	(5.56)	
$n_{non\text{-}HSS}$ = 25								
Total	254.24	147.00	4.43	1%	252.78	145.82	5.12	9%
(n = 1057)	(6.46)	(5.18)	(4.86)		(8.13)	(6.52)	(6.73)	

Note. (a)Numbers in parentheses are standard deviations; (b) “Read” stands for Eighth-Grade Reading End-of-Grade test, and “English” stands for English I End-of-Course test; (c) absence is the number of days absent in the English I course; and (d) dropout is the percent of students who have dropped out of high school.

The Eighth-Grade Reading EOG test scores were compared between the experimental group--those who participated in the program (n=428)--and the control

(non-participant) group (n=629) using a t-test for independent samples: The High School Success students performed better than the Non-HSS students, t (1054) = 3.11, p = .002, Cohen's d = .20, but the effect size was small. As a result, all students' 8th Grade Reading EOG test scores were used as a covariant in the following data analyses to account for initial differences between these two groups.

Research Question 1(a)

The testing data were analyzed in order to explore the quantitative research question posed in Chapter 1: Is there a statistically significant difference between students who were enrolled in High School Success and students who were not enrolled in High School Success, as defined by student performance on the North Carolina English I EOC? To address this question, multivariate analysis of covariance MANCOVA was used to determine whether statistically significant differences existed between the students enrolled in High School Success and students not enrolled in High School Success with respect to the English I EOC. No statistically significant interactions were noticed at .05 level of confidence, so the main effects were examined. Using Wilk's Lambda as a criterion, the main effects of group, gender, and ethnicity were found to be statistically significant: F (2, 1039) = 3.99, p = .02, partial η^2 = .01 for groups; F (2, 1039) = 7.95, p < .001, partial η^2 = .02 for gender; and F (6, 2078) = 4.14, p = .02, partial η^2 = .01 for ethnicity. Follow-up univariant ANCOVA showed statistically significant interaction effect of groups and ethnicity for the English I EOC test scores, F (3, 1040) = 3.62, p = .01, partial η^2 = .01, although the effect size is small. Female students (M = 146.90, SD = 6.01) performed better than male students (M = 145.77, SD = 6.02) on the English I EOC test, regardless of the groups (HSS or Non-HSS), F (1, 1040) = 4.82, p =

.01, partial η^2 = .01 with a small effect size. In general, students enrolled in High School Success (M = 147.00, SD = 5.18) performed better than students not enrolled in High School Success (M = 145.82, SD = 6.52) on the English I EOC test, F (1, 1040) = 7.12, p = .01. partial η^2 = .01. Statistically significant differences were also found between ethnic groups in HSS and Non-HSS students, F (3, 1040) = 5.53, p = .001, partial η^2 = .02. Post-hoc analysis with Tukey's Honestly Significance Difference (HSD) test revealed that White students did statistically significantly better than Black and Hispanic students in the Non-HSS group, but these differences were no longer statistically significant in the HSS group.

The most important aspect of these results is that White students did statistically significantly better than Black and Hispanic students in the Non-HSS group, but these differences were not statistically significant in the HSS group. In North Carolina, the statewide results of the English I EOC for 2009-2101 showed that White students performed at 87.3%, Black students at 63.5%, Hispanic students at 65.4%, and Other students performed at 74.8% (http://www.dpi.state.nc.us/accountability/testing/reports/archive). Non-White students perform lower on the English I test across the state. High School Success erases the achievement gap created between White students and Non-White students.

Research Question 1(b)

A Chi-square test was employed to check the differences for achievement levels measured by the English I EOC test. Of the HSS students, 64% (272 out of 428) reached the proficiency levels (Levels 3 & 4), whereas only 52% (329 out of 629) of Non-HSS

students reached the proficiency levels. This difference was not likely due to chance: χ^2 (df = 1) = 12.93, p < .001.

Since 12% more of the students were proficient on the test, these are important results. All of the students who were enrolled in High School Success could not demonstrate proficiency on the NC Eighth Grade Reading EOG. The state test determined that they were not at grade level when they entered the High School Success class. After one semester of High School Success, 12% more of the students were proficient. Early interventions for ninth graders that include literacy and learning strategies such as the ones that were developed at the University of Kansas are great tools for assisting students in their academic classes (Fagella-Luby & Deshler, 2008). The evidence that there needs to be an early and successful high school intervention if students are going to be successful has been established (Cohen & Smerdon, 2009). High School Success is an effective intervention for more at-risk students to be proficient on the NC English I EOC.

Research Question 2

A Chi-square test was also employed to check the differences in student pass rates in the English I course. Of the HSS students, 91% (388 out of 428) passed the English I course (at least 70 out of 100 in the final course grade), whereas 86% (540 out of 629) of Non-HSS students passed the English I course. This difference was not likely due to chance: χ^2 (df = 1) = 4.37, p = .04.

Research Question 3

Follow-up ANCOVA after MANCOVA showed statistically significant interaction effect of gender and ethnicity for the English I course absence, F (3, 1041) =

2.88, $p = .04$, partial $\eta^2 = .01$. As for the main effect, female students ($M = 5.17$, $SD = 6.15$) were more absent than male students ($M = 4.54$, $SD = 5.95$) for the English I course, F (1, 1041) = 7.35, $p = .01$, partial $\eta^2 = .01$. No statistically significant differences on the English I course absence were found between HSS students and Non-HSS students, F (1, 1041) = 2.38, $p = .12$, partial $\eta^2 < .01$. Similarly, no statistically significant differences on the English I course absence were found between students of different ethnicities, F (3, 1041) = 2.21, $p = .09$, partial $\eta^2 = .01$.

Since the interaction effect between gender and ethnicity was statistically significant, ANOVA was used for male and female students separately to determine whether English I course absence differed between students of different ethnicities. For male students, no statistically significant differences on the English I course absence were found between students of different ethnicities, F (3, 553) = 2.15, $p = .09$. partial $\eta^2 = .01$. For female students, statistically significant differences on the English I course absence were found between students of different ethnicities, F (3, 500) = 3.72, $p = .01$. partial $\eta^2 = .02$. Post-hoc multiple comparisons showed that it was Hispanic female students were significantly more absent (mean difference = 2.75) than Black female students ($p = .006$).

Student Dropout Rates

Of HSS students, 5 out of 428 (1%) dropped out of high school whereas 56 out of 629 (9%) Non-HSS students dropped out. This difference was statistically significant, χ^2 ($df = 1$) 28.02, $p < .001$. Therefore, the data showed a significant decrease in the number of students who dropped out of high school.

Logistic regression was also used determine whether the possibility of dropout differed between students enrolled in High School Success and students not enrolled in High School Success when student gender, ethnicity, and absence were taken into consideration. The BIC with the intercept only was 382.40 and that for the full model with all the predictors was 356.57. The difference was statistically significant, x^2 (df=4) =25.83, p <.001, suggesting that the combination of predictors (High School Success status, absence, gender, and ethnicity) significantly predicted the odds of dropout for these students. Table 7 is the result of the logistic regression.

Table 7: Logistic Regression of Dropout

	B	*SE*	Wald	*df*	*p*	Exp(B)
Constant	-3.36	0.40	71.74	1	< .001	0.04
Group	-2.06	0.49	17.73	1	<.001	0.13
Gender	0.62	0.31	4.06	1	.04	1.85
Absence	0.13	0.02	57.25	1	<.001	1.14
Ethnicity	-0.19	0.18	1.11	1	.29	0.82

Students enrolled in High School Success had a significantly lower chance of dropout in comparison to students not enrolled in High School Success (Wald's statistics = 17.73, p < .001). The odds of High School Success students to drop out are nearly one tenth (0.13) of that for students not enrolled in High School Success when student gender, ethnicity, and absences are controlled. Female students were more likely to drop out in comparison to male students (Wald's statistics = 4.06, p = .04). The odds of male students to drop out are 1.85 times that of female students when student ethnicity,

absence, and High School Success status are controlled. For a student who was absent in the English I course for one more day, the probability that the student would drop out increased by 1.14. Students from different ethnic groups did not differ significantly in their odds to dropout when their gender, absence, and High School Success status were controlled (Wald's statistics = 1.11, p = .29).

Qualitative Data

The 14 chosen students were interviewed at their prospective schools in a semester during the school day after they had been in the class and taken their End of Course tests. They were all interviewed the semester after the semester they had been enrolled in High School Success. The seven teachers were instructed to choose one student that they deemed "successful" in High School Success and one student that they deemed "unsuccessful" in High School Success. Students who received A's in High School Success were labeled successful and students who received F's in High School Success were labeled unsuccessful. The seven teachers who had taught High School Success from its inception were interviewed about their experiences. Six of the teachers were interviewed in person during their planning periods and one of the teachers (who has changed jobs and left her position) was interviewed over the telephone. The two professors who taught the teachers the SIM intervention were interviewed in their offices at the university. One of them was interviewed in person and the other was interviewed over the telephone.

Data were collected in twenty-three, 15-minute (approximately) interviews. The interviews were recorded and transcribed. Pseudonyms were used so the participants could not be identified and interviews were separated into those students, teachers, and

professors. Upon transcription of the interview recordings, responses from these interviews were examined for similar and different categories. The responses were analyzed using the constant comparison method to code the transcripts in order to identify dominant themes. Using thematic analysis, a codebook was created to keep a record of how patterns and themes were identified. This method of qualitative data analysis is based upon grounded theory, which states that the theory is grounded in the data and not on a preconceived idea or notion (Glaser & Strauss, 1967).

Research Questions 4 and 5

Students

After examining the transcriptions of the interviews with the students, the results were analyzed and several themes emerged from the responses. The researcher determined that all of the themes that would be discussed would be mentioned by at least half of the subjects interviewed, so at least seven students had to refer to the theme for it to be used. When asked if High School Success was helpful to them, all 14 of the students responded that High School Success helped them. When asked why they missed school or were late for school, 9 of the 14 students mentioned not getting enough sleep the night before their absences. When asked how High School Success affected their English I grade, 11 of 14 students said that High School Success helped them keep up with their homework. When asked whether HSS helped them in their English or other classes, 7 of 14 students described the class as helping them with school in general or achieving their goals. The themes gathered from the interviews were: (a) students felt High School Success helped them, (b) lack of sleep was a dominant reason for absences and tardies from class, (c) High School Success helped them with homework, and (d)

High School Success helped students in school in general or helped them achieve their goals.

1. Students Felt High School Success Helped Them

When asked what they thought of their HSS class and whether they thought the class helped them in their English class and/or the English I EOC, all 14 students described some way that the course helped or assisted them. Three of the students stated that the class was helpful and that they missed the class. Jimmy said, "I mean, I liked it. I mean it really helped me. I want to come back to it, but you have to be in ninth grade." Seven of the students indicated that that the class provided a support layer for students. Sally said, "It helped my grade a lot because…if I didn't understand something Ms. Smith would help us with it or something like that. It really helped my EOC score because I was just a lot more prepared for what was going to be on it." James said, "It got me like-it prepared me for what we do in the real English class." Sarah said, "It made me want to come to school a lot more because it was fun and I really liked to learn in that class so it would keep me, um, kept up in my English class." Two students stated an overall knowledge of work that students who are not successful in middle school usually do not have about their work. John said, "I had the highest growth in my English class at the time too…HSS, uh, really helped my grade out." Clark said, "Normally I'd get either a low D or a high C and I ended up getting I think a low B, so that was the first year that I really did good." Other students, such as Daniel specifically mentioned the strategies that were learned and how they helped them in their English class. Daniel said, "It helped me out a lot with, um, my English because I had not finished a lot and she gave me some good techniques to help me get through class."

2. Dominant Reasons for Absences and Tardies From Class

When asked what the reasons were that they missed school or were late to school or class during ninth grade, nine of the 14 students mentioned being tired or not getting enough sleep the night before their absence. Billy and Jane are very representative of the interview comments about sleep. Billy said, "Most of the time it was because I overslept." Jane said, "Um, probably sleep, um, or something like that."

3. High School Success Helping Students with Their Homework

When asked if HSS affected their English I grade or their grade on the EOC test, seven of the 14 students mentioned homework specifically and four more described similar activities to homework such as "keeping up with my assignments." Of the 11 students who mentioned homework and assignments, they were very aware that keeping up with their homework was one of the major reasons the class helped them. Abby's comment is very representative of how the 11 students responded with respect to homework. Abby said, "I got to do my homework so it was helping me pass."

4. High School Success Helping Students in Other Classes and with Educational Goals.

When asked whether HSS helped them in their English or other classes, 7 of 14 students described the class as having helped them with school in general or in achieving their goals. Billy spoke about how the class helped him contemplate his future and how he could do better, "It helped me put everything more into perspective and to see everything as an important opportunity. Like not to just for school, it's for college and it's for anything else I want to do-a job, like I have now." Several students described ways that the course helped them understand how to get help. Dean stated, "She didn't

make us, like, sit there and read [books] but she, like, told us like how to look for stuff." Denise said, "She helped me to, like, get help. Like, she helped me with everything basically if I needed help…like if I didn't understand like the way the teacher was explaining it to me, she would explain it another way." Jimmy said, "It made me want to come to school. You know, to learn and all that…Just, uh, gave me a different approach going into those classes, you know, wanting to learn, wanting to get better grades-yeah." Daniel described not knowing an answer and how High School Success helped him work his way through the question and answer. "It made everything pretty much go up, because with the techniques and stuff that she gave me, it helped me, like when I was doing things on my tests, I was like, 'Hm, I don't know that one.' Then I thought about it, I thought [of] some techniques and stuff which made me do a lot better on it."

Teachers

After examining the transcriptions of the interviews with the seven teachers, the results were analyzed and several themes emerged from their responses. At least a majority of the teachers had to mention the theme for it to be cited, so at least four teachers had to refer to the theme for it to be included. The themes gathered from these interviews were: (a) the importance of the mentor relationship between the teacher and the student, (b) that students were experiencing academic success, (c) students using the strategies learned with the SIM intervention, (d) the problems with the stigma of a remedial class, (e) the problems with scheduling and communication at the school level, and (f) statement that teaching the class had been a positive experience.

1. The Importance of the Mentor Relationship Between the Teacher and the Student

Over the course of the teacher interviews, all seven of the teachers mentioned the importance of the mentor relationship between teacher and student. Most of the seven teachers mentioned explicitly that this relationship made more of a difference than any other aspect of High School Success. Ms. Smith said, "Every day kids come by my door and say, 'I miss your class, I miss being in here.' I bet 15 kids stopped by to show me their report cards because they were proud of what they had done. And it's almost like we established a relationship that's still there. So, to me, that's huge because they're still here…They're still here, they're still in school. They're doing well." Ms. Davis said, "I fell into the mentor role with them which I think is the main reason why the class is so successful-because you know the the relationship between the teacher and students." Ms. Brown said, "I think it was the students having a one-on-one relationship with somebody that they knew was gonna, you know, check up on them everyday and be keeping track of their homework assignments." Ms. White said, "I think that they knew that somebody at school cared and noticed they weren't here and some of the time, not all of the time, but some of the time, these are the kids that if they're out, it's kind of a, you know, a 'breather day' for the teacher. And so to call them and say, you know, 'We really miss you'- to call parents and say 'Can you get them back here…The reading skills are important, but sometimes it's much more than just reading skills." Ms. Black said, "I think the biggest factor in High School Success is the relationship between the student and teacher…every student that did better was the student [who] had the best relationship, the better relationship with the teacher." Three of the seven teachers referred to this relationship as being like parent and child. One said she was "their mommy." Another said, "I was mother hen." Another stated that when she encouraged

her students, one stated, “This is why I love you…you told me you’re proud of me. Nobody’s ever supported me the way that, you know, I feel like I can come in here and I can tell you anything.”

2. Students Experiences with Academic Success

When asked if High School Success had been beneficial to students, all seven of the teachers mentioned the importance of experiencing academic success. All of the teachers described students who had been unsuccessful for many, many years in school who, once they had experienced some success in High School Success and/or English I, students became much more successful and confident. All seven teachers mentioned students who stated that this is one of the first times they had ever been successful at school. Ms. Smith stated that she had students who “are finally doing well” and stated that one student said, “This is the first time I have made a B in English-I’ve never done that.” She stated that she had several parents tell her that their child “has never passed an EOC test.” Ms. White said she had a student who said, “Every time I pass you in the hall, I will say there is the lady that helped me pass the EOC…I have never made honor roll and I made it this time.” Ms. Black said, “I had several students who had never, uh, passed an EOG in their lives and they had-they were just thrilled that they had passed…just feeling confident enough to pass that English class, you know, I think that was a big deal for them, you know, so I think that made a big difference.”

3. Students Use of Strategies from the SIM intervention

Four of the teachers felt that there were aspects of the SIM model that were very beneficial and that some of the strategies were directly affecting student academics. One stated, “We can give them all of the testing strategies and get them ready for the EOC.”

Another said, “I think because there was extra practice on the skills and the test taking and all that stuff, they became more confident on how to take the tests.” A good summary of the overall feelings of teachers was from Ms. White: “The Kansas Strategies are good. They are fine, but I think the success of the program has been the people who worked in it together.” There was a majority feeling that the strategies helped, but not the strategies alone.

4. Problems with the Stigma of a Remedial Class

Four of the seven teachers discussed the stigma of the course being a remedial course and the problems that the stigma presents for students and parents. Ms. Smith said, “A stereotype that it has been a ‘special’ class has presented me with a lot of aggression from students and parents.” Ms. White said that her class had gotten better but “there’s still that stigma attached with it that this is the slow class…Students feel that this is a place for dumb kids.” Ms. Black stated that “One of the biggest issues for the kids for the class was the stigma attached to being in a small class.”

5. Problems with Communication and Scheduling at the School Level

When asked what could be improved about High School Success, all seven of the teachers spoke in depth about the problems with communication between the English I teachers and the High School Success teachers. They also spoke at length about the problems that were presented when the administration at the school did not schedule the students in the most beneficial way possible.

They all spoke of problems getting assignments and communicating with English I teachers. Ms. Williams said, “Teachers don’t like to share…trying to find out what they were doing so that I could help my students was the biggest drawback, because teachers

didn't want to let you know what they were doing or let you in on their little world." Ms. Davis said, "The main difficulty I ran into was communication within the school setting. The English I teachers were not very forthcoming in working with me with the kids telling me what they were doing."

The other problem that all seven teachers discussed was the problem with scheduling. Since they were supporting students in an English I class, it was possible for the High School Success teachers to be teaching students from four or five different English I teachers in one classroom. They all spoke of the difficulties of trying to communicate with several different teachers. They stated that if the administration could assign all the students to one English I teacher, it would make a huge difference with what services they could provide to the students. Ms. Williams stated, "If it could be a situation where you were paired with a teacher and you got to know them and you established that relationship, it would be more helpful." Ms. Davis said, "It's been at least two, you know, usually three different teachers involved with the teachers each semester. And with English I teaching different subjects, you know, different matter at the same time, it was very difficult to coordinate it." Ms. White said, "Sometimes you would have three or four different English teachers that you worked with." Ms. Black's response seemed to summarize and support the opinions of all teachers: " I think the kids should all have one English teacher…[that would be] a huge benefit, having one English teacher to work with and not having the class divided."

6. Teaching the Class has been a Positive Experience

All seven of the teachers expressed how much they enjoyed teaching the class and that they thought the class was a success. Ms. Smith stated, "Learning from each other

has been the best." Ms. Jones stated, "It has been wonderful. I have learned a lot about my own teaching. I have learned a lot about how students learn. I hope it never goes away. I want to teach it forever." Ms. Williams stated, "It's something that I have really enjoyed." Ms. Davis said, "For the most part, I've loved it. I hope it continues. I think it's its extremely worthwhile to the school and to the students." Ms. Brown said, "I really enjoyed teaching High School Success. I definitely hope that it's something that continues to be funded. I know that it's something that's really beneficial and has helped to serve a lot of students." Ms. White said, "I know that this will affect the way I teach if I go back into a regular classroom…I feel like this was just such a blessing-like God handing you something on a silver platter-that professionally there is no way that I could ever have hoped to do something like this." Ms. Black said simply, "I love it."

Professors

After examining the transcriptions of the interviews with the two professors, the results were analyzed, and several themes emerged from their responses. Each theme that was mentioned was discussed by both of the professors. The themes gathered from these interviews were: (a) the importance of the mentor relationship between the teacher and the student, (b) the work ethic and willingness of the teachers to learn, (c) teachers and students using the strategies learned with the SIM intervention, and (d) working with the teachers was a rewarding and educational experience.

1. The Importance of the Mentor Relationship Between the Teacher and the Student

Both of the professors discussed in depth the importance of the mentor relationship between the teachers and the students. They both echoed many of the same

sentiments that the teachers had expressed in their interviews. The teachers discussed the relationship from a personal perspective, and the professors discussed it from a broader perspective. Professor Green stated, "There [are] tons of research on the idea of mentoring with, you know, some of the processes like the check in and check out processes that people do…the idea that somebody notices that they are there or not can be a contributing factor to whether or not they graduate-whether or not they come to school every day…Those teachers were advocates for their students and, you know, feeling you matter to somebody…This has been in behaviorist research and sociological research-everything you can think of, that idea of mattering has been shown to be one of the most significant factors of whether or not kids stay in school." Professor Blue stated, "It's giving them a place where where they can achieve-working with a person who who stayed with them…It's just a tremendous opportunity for them, where they can be successful and that success is going to breed commitment and more success and so, yeah, it's that we keep them in school. It gives them a reason to show up."

2. The Work Ethic and Willingness of the Teachers to Learn

Both of the professors discussed the attitude and work ethic of the teachers. They each discussed experiences in the past that had not been successful. They cited the teachers as being professionals who were willing to do what it takes to help students succeed. Professor Green stated, "These were teachers who chose to be involved, which I think is a rare thing sometimes…These are people [who] are motivated to work with students who struggle, and…in their dispositions as teachers that they look towards the students who are not making progress and seek to figure out ways they can bring up their performance. Some of them will do anything we said and some people were

immediately, you know, trying to figure out one piece of what we said to integrate into what they already do, but ultimately I think their personalities played a big role in the way they connect with students." Professor Blue said, "It was unique, in that as opposed to some of the professional development that I have done which is kind of a 'one and done'…we knew that we were going to meet again and that there was some accountability in place. We grew in our knowledge of each other."

3. Teachers and Students Using the Strategies Learned with the SIM Intervention

Since the professors were trainers of the SIM model and taught the teachers the strategies included in the model, they discussed the strategies much more in depth than the teachers did in their interviews. Professor Green discussed the process of engaging students while also teaching them strategies for success. He said, "The kids re-engaged with the idea that reading can be pleasant and something that they want to do, which I think got them to a point where they could believe in themselves…Now you combine that with the just constant attention to building their skills with the different literacy strategies and then just the general working on literacy skills that connect with their testing experiences. I think they sort of put together the total package--building reading and writing skills and immediately applying it to something pleasant that could be good and sort of motivating to students…and then making them more successful in school." Professor Blue said, "The strategies that we used in the training were very specific to the different areas of literacy…Some of them were direct, like reading comprehension skills. The strategies themselves are really specific, and of course, with all the good pedigree they have, with all the research base and, uh, good explicit instructions in the hands of

very capable teachers who were going to make it their own. You know they were going to use the strategies correctly…and also put in a lot of their own talents and skills and background into it…It was just a perfect match for those two accountability measures."

4. Working with the Teachers was a Rewarding and Educational Experience

Just as the students and teachers discussed how much they liked teaching High School Success, the professors also talked quite a bit about what a great experience it was for them. Professor Green stated, "I'd say it was probably one of the more positive experiences of my career, actually, [be]cause they are a very dedicated group." Professor Blue said, "It was fabulous. It helped me grow as a special ed teacher who had to have this working relationship with people from backgrounds somewhat different from mine and in our preparation. So I grew from that and I really appreciate that. You know, the reinforcement of being in such a professional environment... I really had a 'large time' as we say in Eastern North Carolina."

Summary

Chapter 4 presents the findings of the quantitative and qualitative data collection. A MANCOVA was used to determine whether significant differences existed between the students enrolled in High School Success and students not enrolled in High School Success with respect to the NC English I EOC and attendance. No statistically significant interactions were noticed at .05 level of confidence, but after the main affects were examined using Wilk's Lambda as a criterion, the main effects of group, gender, and ethnicity were found to be statistically significant. Follow-up univariant analysis of covariance showed a statistically significant interaction effect of groups and ethnicity for

English I EOC scores and a significant interaction effect of gender and ethnicity for absence days, although both effect sizes were small. Post-hoc analysis with Tukey's HSD test revealed that White students did statistically significantly better than Black and Hispanic students in the Non-HSS group, but these differences were not statistically significant in the High School Success group. Follow up univariant analysis of covariance showed significant interaction of gender and ethnicity for course absences showed females were absent more than males and no statistically significant differences were noticed between students enrolled in High School Success and students not enrolled in High School Success and not statistically significant differences were found between students of different ethnicities for absences. A Chi-square test was employed to check the differences for achievement levels measured by the English I EOC, as well as the English I course grade. Sixty-four percent of the students enrolled in High School Success reached proficiency levels, whereas only 52% of the students not enrolled in High School Success reached proficiency levels. Of the students enrolled in High School Success, 91% passed the English I course, while only 86% of the students not enrolled in High School Success passed the English I course. Neither of these was likely due to chance. With respect to dropout rates, 1% of students enrolled in High School Success have dropped out of high school whereas 9% of students not enrolled in High School Success dropped out of high school; therefore, the data showed a significant decrease in the number of students who left (after their first two years of high school).

The analysis of the qualitative data from the three groups of participants identified the major themes in the categories. Even though students were chosen because they were "successful" or "unsuccessful" (determined by whether or not they passed High School

Success), the student answers were remarkably similar. The student responses were almost exactly the same, regardless of whether or not they passed High School Success. Students had four major themes: (a) students felt HSS helped them, (b) dominant reasons for absences and tardies from class, (c) HSS helping students with homework, and (d) HSS helped students in other classes and/or life. Teachers had six major themes: (a) the importance of the mentor relationship between the teacher and the student, (b) students' experiences with academic success, (c) students' use of the strategies learned with the SIM intervention, (d) the problems with the stigma of a remedial class, (e) the problems with scheduling and communication at the school level, and (f) teachers' belief that teaching the class had been a positive experience. The professors had four major themes: (a) the importance of the mentor relationship between the teacher and the student, (b) the work ethic and willingness of the teachers to learn, (c) teachers' and students' use of the strategies learned with the SIM intervention, and (d) working with the teachers was a rewarding and educational experience.

Excerpts from the interviews were provided in order to illustrate examples of the responses. There were common themes among all three groups. All groups discussed how beneficial they thought High School Success was to students and teachers and themselves. Another major theme with all three groups was the idea that High School Success can and will help students in this and other endeavors after they experience some academic success.

Based on the results described, Chapter 5 presents an interpretation and discussion of the findings. The findings will be discussed in a context of the existing body of literature and prior research. Additionally, implications of the findings for future students,

teachers, and professors will be presented. There will also be recommendations for further research based on the findings.

CHAPTER 5: DISCUSSIONS, IMPLICATIONS FOR PRACTICE, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

This study was conducted to determine the impact of the High School Success class on student achievement on the NC English I EOC, student pass rates in English I, student attendance rates, and the student dropout rate for students who began high school below grade level in reading. Multivariate analysis of covariance (MANCOVA) was used to determine whether statistically significant differences existed between the students enrolled in High School Success and students not enrolled in High School Success with respect to English I EOC and attendance. A Chi-square test was employed to check the differences for achievement levels measured by the English I EOC test as well as the passing rate of the English I course grade. Logistic regression was used to determine whether the probability of dropout differs between students enrolled in High School Success and students not enrolled in High School Success. Interviews were conducted with the students, teachers, and professors involved with High School Success. The responses were analyzed using the constant comparison method to code the transcripts in order to identify dominant themes. The purpose of the study was to provide data about the effectiveness of the High School Success class, as determined by English I EOC scores, the student pass rate for English I, student attendance rates, and student dropout rates.

The quantitative data obtained by the study showed that students who had High School Success were more likely to perform higher on the English I EOC exam and in the English I class. High School Success was also a strong deterrent for students dropping out of high school (after two years of high school). The qualitative data obtained through interviews with students, teachers, and professors involved with the class provided results that demonstrate that all of the people involved believe the course was beneficial to students. While all the data are not completely positive, most of the effects of High School Success are beneficial for at-risk students.

Discussion

In general, students enrolled in High School Success (M = 147.00, SD = 5.18) performed better than students not enrolled in High School Success (M = 145.82, SD = 6.52) on the English I EOC test, F (1, 1040) = 7.12, p = .01. partial η^2 = .01. High School Success was a positive intervention for the students in regard to their performance on the NC English I EOC, but the effect size was small. Even though the overall effect size was small, High School Success made a bigger difference with non-White students. Statistically significant differences were also found between ethnic groups in HSS and Non-HSS students, F (3, 1040) = 5.53, p = .001. partial η^2 = .02. Post-hoc analysis with Tukey's HSD test revealed that White students did statistically significantly better than Black and Hispanic students who were not enrolled in High School Success but these differences were no longer statistically significant for the students who were enrolled in High School Success. High School Success is an effective intervention and is significantly more effective for minority students.

A Chi-square test was employed to check the differences for achievement levels measured by the English I EOC test, as well as the passing rate of English I. Sixty-four percent of the High School Success students reached proficiency on the English I EOC, while only 52% of the students not in High School Success reached proficiency. Of the students enrolled in High School Success, 91% passed the English I course whereas 86% of the students not enrolled in High School Success passed the English I course. Since passing English I and proficiency on the state exam are important predictors of success in high school, these differences are noteworthy.

The qualitative responses to the question of whether or not High School Success helped them on the EOC and in the English I class demonstrated that students had an overwhelmingly positive response. Even though seven of the 14 students were deemed unsuccessful by the teacher, (and all seven of them failed High School Success, English I, or both) all 14 students stated that the class helped them. The student responses support the quantitative data. The teachers and the professors also mentioned the importance and significance of students' experiences with academic success. All the evidence, quantitative and qualitative suggests that High School Success is very helpful to students on the NC English I test and for the English I class.

In regard to student attendance, no statistically significant differences on the English I course absences were found between HSS students and Non-HSS students, F (1, 1041) = 2.38, p = .12. partial η^2 < .01. Similarly, no statistically significant differences on the English I course absence were found between students of different ethnicities, F (3, 1041) = 2.21, p = .09. partial η^2 = .01. The study found that females are more likely to be absent and that Hispanic females are more absent than any other group, but High

School Success made no difference in how often students attended school. Interestingly, High School Success made a larger difference among non-White students on performance on the English I EOC, but had no effect on how often students attended school. The qualitative responses to the question of whether High School Success made an impact on attendance did not support these findings. When asked if the class made a difference on whether or not students came to school, all seven of the teachers responded that they thought it helped with student attendance. Both of the professors also stated that they thought the class would help with student attendance rates. Seven of the students stated that it made a difference for their attendance and seven students stated that it had no effect at all.

High School Success had a significant effect on whether or not students dropped out of high school. Of HSS students, 5 out of 428 (1%) dropped out of high school whereas 56 out of 629 (9%) of non High School Success students dropped out. This difference was statistically significant, χ^2 (df = 1) 28.02, $p < .001$. Therefore, the data showed a significant decrease in the number of students who left before they graduated. After performing a logistic regression on the High School Success and non-High School Success students, the probability of High School Success students dropping out was found to be 13% less than students who were not enrolled in High School Success. In one of the most important statistics that schools, teachers, students, and parents are involved with, High School Success makes a major difference in keeping students in school. It is a successful dropout prevention intervention for students (after being enrolled for the first two years of high school).

The qualitative responses also supported High School Success as a successful dropout prevention intervention. The students, in their interviews, discussed how High School Success helped them in many other classes and how it helped them prioritize what they needed to get done. Many of them discussed how the class made them want to come to school more and that it taught them how to be successful and how to get help in more of their courses. As Dean stated, "It helped me put everything more into perspective and to see everything as an important opportunity." The teachers and professors both discussed the importance of the mentor/mentee relationship between the teachers and students. The teachers unanimously thought that relationships formed were the most important aspects of High School Success. As Ms. Brown stated, "I think it was the students having a one-on-one relationship with somebody that they knew was gonna, you know, check up on them everyday and be keeping track of their homework assignments." Both professors referenced research about this relationship and how it had been proven to help students stay in school. Dr. Green summarized this position: "There [are] tons of research on the idea of mentoring with, you know, some of the processes like the check in and check out processes that people do…The idea that somebody notices that they are there or not can be a contributing factor to whether or not they graduate-whether or not they come to school every day…Those teachers were advocates for their students and, you know, feeling you matter to somebody and this this has been in behaviorist research and sociological research…That idea of mattering has been shown to be one of the most significant factors of whether or not kids stay in school." Dr. Green's statement is surely backed up by the results of the study. It is clear that the students, teachers, and professors all saw the benefits of High School Success in regard to the dropout statistics.

Connections to Previous Literature

High School Success is a course designed to assist students who enter high school with deficiencies. All of the students enrolled in High School Success were not at grade level in reading according to the NC 8th Grade Reading test. As Cabarrus County administrators receive students who begin high school as struggling academic learners, they must provide assistance immediately for students to successfully graduate from high school. Dropout prevention must focus intensively on Grade 9 to make a difference (Allensworth & Easton, 2005). Factors such as attendance and whether or not a student is on track can accurately predict (with about 85% accuracy), by the first year of high school, whether or not a student will drop out of high school (Bridgeland et al., 2009). High School Success was designed to be an effective intervention. One of the major keys in developing these interventions is to focus on the freshman transition year and the importance of getting off to a good start in high school (Neild et al., 2008). This study demonstrated that High School Success is an effective intervention for students who otherwise might have struggled in their freshman year.

Because of the strong link between freshman-year course performance and eventual graduation from high school, it is important to choose interventions and strategies that will help students in their overall success (Allensworth & Easton, 2007). Adolescent literacy is one of the major deficits found in students who are at risk for dropping out of high school. The greatest need in this area is to develop reading comprehension and fluency (Jetton & Dole, 2004). Campbell, et al.'s work (2000) found that significant numbers of entering high school students have weak or limited reading comprehension skills. The High School Success class was designed to provide a class

where students could receive strategies to assist with these deficiencies. This study demonstrated that High School Success provides an intervention that assists students and helps them perform better on North Carolina state exams and in their English class.

The SIM model that was developed at the University of Kansas has been a very effective literacy intervention for many students for more than 30 years. It was developed as a strategy for students with learning disabilities. Previous research has shown that students who are not classified with learning disabilities exhibit problems with language learning similar to those experienced by students who are classified with learning disabilities (Sparks & Ganschow, 1993; Sparks et al., 1992). Earlier research also suggests that even though the SIM strategies were developed primarily for students with known learning disabilities, students without known learning disabilities who use these learning strategies will also improve their performance (Boudah & O'Neill, 1999). This study demonstrated that the SIM model used in High School Success was beneficial to students who do not have an identified learning disability.

Because of the importance of the English I class in Cabarrus County Schools, High School Success was also designed as a way to supplement deficiencies within the English I class. Students may become better readers or more fluent readers because of their literacy strategies, but if they do not pass English I, they are likely to dropout of high school because that would keep them off-track for graduation. Allensworth and Easton (2005) found that students who got off track during the ninth grade had a 22% on-time graduation rate, compared with an 81% on-time graduation rate for students who were on track after their first year in high school. Because of the intense need to pass English I and stay on track, High School Success was designed to assist with literacy

through the SIM, but also to help students pass English I. This study demonstrated that students in Cabarrus County Schools who are enrolled in High School Success are more likely to pass English I and therefore stay on track to graduate from high school. One of the students in this study, James, stated how High School Success had supported him in English I: "It got me-like, it prepared me for what we do in the real English class."

Some researchers have referred to intense literacy instruction for students as ensuring that the students have a "double dose" of English to supplement their deficiencies and help them succeed in their first year of high school. These courses in English work with students on strategic reading skills for success (Neild et al., 2008). In one major study involving Talent Development High Schools, this type of ninth-grade instructional program using "double dosing" to help students succeed has shown very promising results (Balfanz, Legters, & Jordan, 2004). This idea of "double dosing" led to High School Success being scheduled during the same semester as English I. Since Cabarrus County Schools is on a 4X4 Block Schedule, half of the students' coursework is related to English. High School Success provides the opportunity for students to get this double dose and be successful. This study demonstrated that the "double dose" assists students with standardized tests and in their English coursework.

The other aspect of High School Success that is very beneficial is the mentor relationship that was discussed by the teachers and professors. Many students have difficulty with the transition from middle to high. These transitions from a more structured and supportive middle school environment to a larger and less structured high school can be extremely hazardous for many students (Cohen & Smerdon, 2009). High School Success creates a small environment that fosters the relationship between students

and teachers that the teachers and professors unanimously mentioned as the most important aspect of the class. This mentor relationship is one of the most important aspects of High School Success. The time that the course provides to develop this relationship is one of the elements that separate High School Success from the other SIM delivery methods. It is not simply a literacy intervention; it is an intervention provided within the context of a relationship with a caring and motivated teacher.

High School Success has demonstrated that it is an effective intervention for students because student performance on the NC English I EOC is higher for High School Success students than for students who are not enrolled in High School Success. It provides a necessary early intervention for students to make sure that they are on-track at the end of their first year of high school. High School Success provides an effective literacy intervention that demonstrates that even though the SIM was designed for students with learning disabilities, it was effective for the 428 Cabarrus County students served in High School Success who were not learning disabled. This study demonstrated, through interviews with students, teachers, and professors, that High School Success provides students with the opportunity to be mentored and supported by a motivated and caring educator who can help students succeed. When all of these elements are combined, this study demonstrates that students enrolled in High School Success were significantly less likely to dropout of high school after the first two years because they are more likely to perform better on the state test and also in the English I classroom.

Limitations

One limitation of the study is that it was conducted with one particular group of students in one suburban district in North Carolina. The sampling procedure decreased

the ability to generalize the findings of this study, because it was restricted to the seven traditional high schools in Cabarrus County Schools, the 10th largest school district in North Carolina, with approximately 29,000 students. Influences on the participants such as education level and involvement of parents, absences from school, and transience of the family could not be controlled. There are other factors that could have affected the test scores, such as teacher effectiveness or student IQ. Controlling for many or some of these factors could result in an analysis that is more in-depth. Also, dropout data are incomplete. High School Success has only been in place for two school years. The students who are being evaluated have only been able to complete two years of high school. While only 1% of them had dropped out of high school at the end of 10th grade, it is possible that more of them will drop out before they graduate from high school. Even though most of the risk for dropping out of school occurs in the first year of high school-and as students get older, they are less likely to drop out of school-it is still possible that the students who had High School Success and are still in school could drop out before they graduate.

The study only included first-time ninth-graders who did not score at grade level on the eighth-grade End-of Grade test and who were not classified with learning disabilities or limited English proficiency, even though the SIM was developed for students with classified learning disabilities. The students were not told that they were being examined; they may have surmised that someone is examining them in their classes, but should not have been aware that their performance on the NCEOC test in English I was being examined.

Generalizability

The study cannot be generalized to a greater population than a suburban district in North Carolina. The study included results from a specific LEA at seven traditional high schools. Due to the parameters of the study, the researcher cannot generalize the findings to urban schools, rural schools, or significantly larger districts. The NC English I EOC test is specific to North Carolina and its specifications may not produce similar results using a different test or criterion for the test. While this may be an effective intervention in any school district, these specific results cannot be generalized to other districts or other states.

Implications for Practice

Based on the findings of this study, several recommendations for practice emerge:

1. The results of the performance for non-White students on the NC English I EOC are important and significant. White students did statistically significantly better than Black and Hispanic students in the group of students who were not enrolled in High School Success but these differences were not statistically significant for the students enrolled in High School Success. For many standardized tests, there is a significant "achievement gap" that exists between White students and non-White students. This is an effective intervention for all students, but the fact that it eliminates the achievement gap between White and non-White students is significant because minority scores go up after having High School Success. This intervention should be readily available for non-White students as a way to increase their achievement.

2. It is important for the school administration to try to assign students enrolled in High School Success to one English I teacher. The number one problem that all seven of

the High School Success teachers mentioned was having students from more than one teacher in their class. Administrators at the school level must try to ensure that the High School Success teachers do not have to facilitate the assignments from numerous teachers by assigning the High School Success students into one English I teacher's English classes. A strong message from all the teacher interviews was that an effective and collaborative teacher for them to work with would help more students succeed. With pre-planning before the semester starts, school administrators can strategically schedule High School Success students with one effective and collaborative English I teacher for maximum results with minimal effects on the rest of the school schedule.

3. All student, teacher, and professor participants discussed the success of the program. Three students, three teachers, and one of the professors mentioned expanding the program. One of the students said that they did not want to leave the program, but it was only open to ninth graders. Another two students said they were aware of many other students who needed the support but did not get it. Several teachers mentioned they would like for the students to get more support once they left ninth grade. District and school administrators should consider adding the course for sophomores and beyond who need the service. They should also consider adding a similar course in other subject areas, such as math. Since much of the research and all of the participants suggest that the relationship is the most important aspect of the program, developing programs in other areas that create a similar positive "academic relationship" is very feasible. For example, another course that many students have problems with in the ninth grade is Algebra I. A similar course that supplements the work of Algebra I and also teaches students strategies for success could be very beneficial to many students in ninth grade.

Courses such as this can provide students help in Algebra I or English I, but will also establish the mentor relationship that the teachers talked about in their interviews. When students know that an adult is there to help them in the class that they have traditionally struggled with, it provides them with stability and an advocate.

4. The importance of homework and staying up to date with homework assignments was very evident from the student and teacher interviews. School and district administrators should work to make all students, parents, and teachers aware of how important homework is in the academic equation. School administrators need to work with students and parents to help them keep their students current on homework assignments. They should also work with teachers to make them aware of how important homework is to the academic success of students. A very important aspect of the SIM intervention is the idea that students become more independent. The strategies in High School Success are supposed to help students with their English class and with the EOC in English I, but they are also supposed to help students know how to navigate tests and the classroom better. Several of the students mentioned how the class helped them learn how to ask questions better and get assistance from teachers. This idea of independence and responsibility is very important for the future success of the students.

5. Another important finding from the interviews with the teachers and professors was the model of staff development that was used to train the teachers. The staff development model of recurring sessions over time was a very successful practice. The teachers and professors both cited the significance of being invested in each other and forming a relationship over time. They stated that this relationship and investment led to much more meaningful staff development. District administrators need to be aware of

this model and try to implement staff development in this context for maximum benefit and the elimination of the "one and done" model that one of the professors cited as being unsuccessful. Staff development where the instructor and the participant both know that there will be at least three or four sessions will lead to staff development that is changed and modified based on the needs and questions of the participants. The professors and the teachers both indicated that they benefited tremendously from this model because they established relationships and felt comfortable with one another.

6. A majority of the teachers mentioned the negative stigma that was associated with a remedial class. Teachers mentioned having to fight "battles" with parents and students about the student being in High School Success. School and district administrators must be very aware of this problem and do everything they can to eliminate the stigma. They should educate students and parents as much as possible and be aware of the names for and connotations of classes that deter students from taking advantage of services that will benefit them.

7. The SIM intervention has been proven to be an effective model for secondary students, with more than 30 years of research on its use. School administrators and teachers need to learn as much as possible about the positive effects of the strategies used in the model. Even if districts and schools cannot implement complete periods or courses for interventions, they can make sure that their teachers are equipped with the strategies that have been developed at the University of Kansas. The knowledge of these strategies and how they can benefit students will assist teachers to be as effective as possible with students who have not been successful before they get to high school.

8. Another important finding from the interviews with some of the teachers and the professors (who have had many years of experience with the KUCRL model) is the importance of choosing the right teachers to work with students who struggle. Both of the professors talked about it in depth. Principals at participating schools decided which teachers would be assigned to the High School Success classes. The principals were told that High School Success would be a class for students who entered high school with deficiencies. They were also told to choose a teacher for High School Success who would accept the challenge and who liked helping students who struggle. In this case, the principals chose wisely.

Recommendations for Future Research

Research that examines interventions for high school students is much more limited than research for struggling elementary and middle school students. Because of the aforementioned dropout problem in the United States, this is a very important topic for investigation. In response to this lack of research, recommendations for future research follow.

1. Continuing and completing the study of the students enrolled in High School Success when they have been in high school for four years. Currently, the oldest students who have had High School Success are only in the 11th grade. Those students need to be monitored to determine whether that they continue their success and graduate from high school at the same rate.

2. This study indicated the importance of attendance for student success. It also indicated that for all of its positive effects, High School Success did not have a positive effect on school attendance. The study did find that a student missing just one more day

of English I made them more at risk of dropping out of high school. This indicates that attendance is extremely important. An increased understanding of why at-risk students miss school and what keeps students from being absent from school would be very beneficial.

i. Qualitative research exploring the reasons that at-risk students miss school would contribute to the understanding of how to keep students from being absent.

ii. Qualitative research comparing the at-risk students who miss school chronically to the at-risk students who miss very little school would contribute to the understanding of why students are absent from school.

3. This study indicated that Hispanic females were more frequently absent than any other demographic group. Further study with this group as to why they are absent and their attitudes about being absent from school would be very beneficial.

4. All of the students who were examined in this study were below grade level when they left middle school, according to the 8th grade test. Further study should be done on effective interventions for middle school students so that fewer students enter high school at risk for dropping out of high school.

5. The principals played a major role in the success of the program because they chose teachers who were successful and enjoyed the challenge. They did not have much guidance or preparation on how to make that choice. Further research should be done on the role of the administrator and teacher selection for remedial and intervention programs, which would help guide principals on how to make better teacher selections would be very beneficial.

6. A majority of the students mentioned lack of sleep as a major reason for being late or absent from school. Since attendance is such a strong predictor of school success, further study about student sleep deprivation or time management for students to get more sleep could be very beneficial.

Conclusion

The findings of this study contribute to the expanding knowledge of ways to prevent students from dropping out of high school. High School Success was created as a way to assist students who enter high school with significant deficiencies. The study revealed that students in High School Success made significant gains on NC English I EOC test scores and on proficiency levels on the NC English I EOC. High School Success students also passed the English I course at a significantly higher rate than students who were not enrolled in High School Success. The study also revealed that at-risk students who were enrolled in High School Success were significantly less likely to drop out of high school after their first two years of high school when compared to at-risk students who were not enrolled in High School. The High School Success class has been very successful, and should be continued in the school district where it has already been implemented.

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APPENDIX A: INTERVIEW QUESTIONS

Student Questions

1. What did you think of your High School Success class?
2. If you came to school late and it counted as an absence, what was the reason?
3. If you missed a full day of school, what was the reason?
4. How did High School Success affect your school attendance?
5. How did High School Success affect your English I grade and/or EOC?
6. How did High School Success affect your grades in other classes?
7. How could the class be improved?
8. Any other comments you would like to make about the class?

Teacher Questions

1. How was teaching your High School Success classes?
2. What effect did the class have on the students' attendance?
3. What effect did the class have on students' English I grades and/or EOC grades?
4. Were there difficulties involved with teaching High School Success? If so, please elaborate.
5. How can we improve the High School Success class from the teacher's perspective?
6. Any other comments you would like to make about the class?

Professor Questions

1. How was working with the teachers for High School Success?
2. From your perspective, why would this class help student attendance?
3. From your perspective, why would this program help student English I grades and/ or EOC grades?
4. How could the program be improved?
5. Was this experience unique in any way from programs you have taught to other high school teachers?
6. Any other comments you would like to make about the program?